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ECONOMIC DEVELOPMENT AND CULTURAL CHANGE

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ECONOMIC DEVELOPMENT AND CULTURAL CHANGE
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INDUSTRIALIZATION, LABOR CONTROLS, AND DEMOCRACY*

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Analyses of underdeveloped economies leave one with a curiously ambivalent impression about the appropriateness of democratic political institutions for the range of problems confronting a society which wants to industrialize. On the one hand, strong professions of allegiance to democratic ideology are not uncommon as, for example, in Professor Lewis' report of the view of the participants in a seminar on economic growth held at Tokio in April 1957: "we all agreed that at the margin democracy is more important than growth; none of us wishes to proceed more rapidly than a democratic framework would allow."[1] On the other hand, many comments and observations in the proliferating literature on economic development lead one to question whether democracy is consistent with accelerated growth at low levels of national income. In the report referred to above Professor Lewis remarks that "these countries have to pull themselves up by their own bootstraps,"[2] a process which in the doing may not command widespread consent. Professor Kindleberger asserts that "the social change which is inevitably associated with economic development, whether as prelude or result, seems, more often than not, to be convulsive."[3] Professors Kerr, Harbison, Dunlop, and Myers wonder whether the discontent and protest on the part of labor "may become so 'radicalized' as to threaten the success of the [growth] process."[4] Mr. Mehta has no doubt but that it would and urges underdeveloped economies to limit the scope of trade unions: "...but fighting the elections on specific issues, forming the Government or the opposition, agitation and propaganda on political problems and similar issues should be left outside the trade union field."[5]

* This study was made under a fellowship granted by the Ford Foundation for the academic year 1957-58, for which I wish to express my appreciation. I should also like to thank Alec P. Alexander and Rudolph C. Blitz for their helpful suggestions.

1. W. Arthur Lewis, "Consensus and Discussions on Economic Growth: Concluding Remarks to a Conference", Economic Development and Cultural Change, Vol. VI, No. 1 (October 1957), p. 80.

2. Ibid., p. 77.

3. Charles P. Kindleberger, Economic Development, New York, 1958, p. 223.

4. C. Kerr, F. H. Harbison, J. T. Dunlop, and C. A. Myers, "The Labour Problem in Economic Development", International Labour Review, Vol. LXXI, March 1955, p. 235.

5. Asoka Mehta, "The Mediating Role of the Trade Union in the Underdeveloped Countries", Economic Development and Cultural Change, Vol. VI, No. 1 (October 1957), p. 20.

These observations lead one to speculate about the necessity of limiting the collective activity of workers where underdeveloped countries are undergoing programs of accelerated industrial development. If one appraises their prospects, it is possible to see why one might think it necessary to subordinate the union and other working-class organizations to those who have assumed responsible leadership for growth. Yet when one looks back at the experience of the developed economies of the west during the 19th century, it is difficult not to conclude that working-class institutions by articulating the values and goals of the working population had something to do with the emergence of political democracy. Does this then mean that the democratic outlook is dark for those countries standing on the threshold of industrial development?

However ineluctable this question may be, it poses one of the big issues of this generation. We therefore propose to seek some clues to the answer by examining the controls which were imposed on labor during the industrial revolution in the western world. Using Great Britain, Germany, the United States, and Soviet Russia as historical sources, we shall attempt to identify substantive economic conditions which may serve to explain these controls and also to foreshadow the type of labor controls which one may expect to accompany economic growth in the underdeveloped areas. As suggested, this analysis will only offer clues to the answer of the question posed. It will be suggestive and in no sense definitive. Indeed, the nature of the problem precludes definitive solution. Yet the very tenuousness of the links between labor controls and democracy warrants the attempt to seek out more substantial connections.

I. Labor Discontent and Labor Controls during an Industrial Revolution

Although the term "industrial revolution" no longer finds much favor among economic historians, it has been given a new lease on life by students of economic development who, while observing the problems of underdeveloped economies, do not seem to have absorbed so bland a view of the growth process as the former from looking back at the past performance of the developed economies. Phrases such as "the take-off into self-sustained growth",[6] "the critical minimum effort",[7] and "the hump"[8] abound in the literature to describe a period in which development becomes so intensified that it involves more than marginal adjustments around an equilibrium. If, as Professor Lewis suggests, the critical task for the underdeveloped economy is to increase net investment from something less than 5% to something more than 12% of the net national product, this may indeed call for an economic effort beyond the capacity of the existing social order. Changes in the social order, however, may precipitate discontent and unrest in the gathering industrial labor force. Thus the industrial revolution

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6. W. W. Rostow, "The Take-Off into Self-Sustained Growth, Economic Journal, Vol. LXVI, March 1956, pp. 25-48.

7. Harvey Leibenstein, Economic Backwardness and Economic Growth, New York, 1957, pp. 94-110.

8. See, for example, John Strachey, Contemporary Capitalism, London, 1956, p. 197.

The sources of discontent during such a period are not hard to discern. In the first place, the initial success of accelerated growth is likely to depend on the postponement of the gratification of many of the wants it creates. On the one hand, the expansion of secondary and tertiary production, a typical characteristic of the early states of industrialization, is contingent upon a release of the external economies of growth.[9] Insofar as transportation and communication systems, urban and educational facilities, and industrial construction arise from investment which is indivisible and interdependent, the expansion of consumable output will be delayed pending the diffusion throughout the economy of the external economies it contains. The building of a railroad network, for example, lowers transport costs for industries yet to be built and for labor skills yet to be trained. Though each mile of track laid adds to the net national product, consumption cannot increase until the transport-using output is produced.

On the other hand, the preferences of households will be affected by the structural changes in the labor force during the industrial transition. Whether they are pushed out of an agricultural-handicraft sector by "land reforms", or pulled to the industrial-manufacturing sector by the attraction of higher money wages, workers move from a situation in which the market is on the periphery to one in which the market is at the center of their existence. Preferences once satisfied directly can now only be satisfied indirectly by first earning claims to output and then spending them in particular markets. The markets of an urban economy, however, through the demonstration effect will raise consumption in the hierarchy of values affecting behavior and may create aspirations for goods beyond the capacity of individuals to satisfy them.[10] Moreover, by promoting utilitarian and self-help values the markets through which labor is recruited subvert the traditional values that once may have had a hand in inducing labor to acquiesce passively to its subsistence status.

In the second place, discontent may be accentuated by the incidence of unemployment among industrial workers. With the proportionate rise of net investment during the industrial revolution, a larger proportion of the expenditures of an economy are subject to the uncertainties that inhere in investment planning. Unemployment will periodically plague households as firms from time to time become bearish on the outlook in the market for increased productive capacity and cut back investment expenditures.

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9. There is by no means agreement among economists about the extent to which external economies are relevant to problems of development. In part the disagreement on this issue is ideological in origin, for its resolution has meaning for the larger issue of the appropriateness of competitive economic institutions for the development of currently underdeveloped economies. The extreme positions in the ideological continuum are perhaps best represented by Peter T. Bauer and Basil S. Yamey, who believe that external economies are relatively unimportant (cf., The Economics of Underdeveloped Countries, Chicago, 1957, p. 244), and Paul S. Baran, who believes that they are all-pervasive (cf. The Political Economy of Growth, New York, 1957, pp. 190-194).

10. Cf. R. Nurkse, Problems of Capital Formation in Underdeveloped Countries, New York, 1953, pp. 57-81.

Unemployment, of course, is an ancient disease, but in the industrialization process, it is likely to become exacerbated. For one reason, unemployment, after the manner of Marx's industrial reserve army, becomes more concentrated with the relative growth of the urban-industrial sector. For another, the cause of unemployment will appear to be endogenous to the economy and not, as in a pre-industrial period, the result of uncontrollable contingencies such as plagues or severe drought. Finally, to the extent that economic growth induces a decline in mortality rates prior to a decline in fertility rates, the unemployment potential grows with the increasing size of the labor force.

Whatever the source of discontent, it may manifest itself in one or more of the following ways: workers may (1) resist assuming the obligations of regular employment, being frequently absent from, or late to, work, or, when on the job, being fomenters of dissatisfaction and opposition to labor discipline; (2) accept the obligations of industrial employment, but try to achieve higher status in the industrial hierarchy; (3) move to another location where they think their prospects might be better; or (4) band together in organized efforts to obtain economic and/or political concessions from employers or governmental authorities. Of these alternative manifestations of labor discontent, the fourth poses the most serious threat to the achievement of a high rate of industrial growth during the critical transition. The second and third are desirable from this point of view--that is, factors which induce greater rates of vertical and horizontal mobility allow a more flexible and efficient use of labor. The first, though an annoying cause of low labor productivity, can often be handled by individual employers with the aid of ad hoc controls, particularly if there is an abundant supply of labor. Trade unions and labor parties, however, raise problems of a different order. If they are successful in securing a larger share of the national income and in limiting the freedom of action of entrepreneurs, they may have the effect of restricting the investment surplus so much that the rate of economic growth is inhibited.[11]

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11. In his recent stimulating attempts to resurrect classical political economy and apply it to problems of economic development, Professor Lewis argues that unlimited supplies, i.e., perfectly elastic supplies, of labor are essential for the accumulation of capital in a capitalistic sector during a first stage of development when it grows relative to a subsistence sector. This is because the propensity to save is higher out of profits than other income shares and so long as labor exists in unlimited supply, wages will be maintained at a subsistence level (or a little above it), allowing capitalists to appropriate the growing surplus between the wages bill and total product. When, however, accumulation catches up with population, a "turning point" is reached where the classical conditions do not hold and the neo-classical conditions for the first time come into their own. For now labor is no longer infinitely elastic and wage rates can be expected to rise with further accumulation, leading to a sharing of productivity increases among all the factors of production. Professor Lewis suggests that the longer the period of the first stage of development, the higher the rate of profit and therefore the rate of saving, and the greater the rate of growth when the turning point has finally been reached. He also indicates that trade unions may be considered exogenous forces which may act to raise wage rates before the unlimited supplies of labor are exhausted. The economy bent on maximizing growth therefore has to think about restraining trade unions. W. A. Lewis, op. cit.; idem, "Unlimited Labour: Further Note", The Manchester School, Vol. XXVI, January 1958, pp. 1-32.

It is important to note that we are not asserting that trade unions and labor parties are radical symptoms of labor discontent which always and everywhere have a deadening influence on economic growth. On the contrary, they could well have a conservative effect on society in that they articulate and regularize dissidence and make it possible for society to deal with it in a consistent and continuing fashion. Moreover, trade unions, at least, as bureaucracies responding to laws of their own independent of the rank-and-file, could even have the effect of repressing or side-tracking discontent. But such moderating influences, which presumably have a favorable effect on growth-creating forces, cannot materialize until the union becomes firmly established and accepted in society, a status it is not likely to attain until the level of aggregate income is high enough to create what one might call the bargaining margin. At some point in the growth of income it becomes feasible for the first time for workers to bargain collectively over wages because the investment surplus has grown large enough to survive "wage appropriations". Then the institutions of the labor movement can rise around the business of maximizing the wage appropriation; and they can acquire an existence of their own dependent upon the continued existence of the social order that they originally arose to bedevil.

In an interim period, however, prior to the production of the requisite level of income, when organizations of labor are neither well established nor accepted, it is by no means clear how the labor movement will go about achieving its ends. The movement itself may will be divided by internal struggles between pragmatic trade unionists, on the one hand, and revolutionary political radicals, on the other. Working-class labor leaders up from the ranks may face serious competition for the control of the labor movement from disaffected middle-class intellectuals, who do not have a particularly strong allegiance to existing institutions. Looking beyond the short-run goals of higher real wages and better working conditions to some ultimate stage of social development where economic problems have allegedly been resolved by abundance and having no responsibility for the economic order, the latter may not hesitate to fan the flames of discontent, to urge workers on to riot and revolt, and generally to interfere with the adjustment and commitment of workers to industrial employment. It is in the youth of a labor movement that it is likely to be most radical, precipitous, and unpredictable.

If the conditions propitious for economic growth are threatened by the activities of a nascent labor movement, society, acting through the constituted political authority, must in its turn formulate a policy for controlling labor. Of the possible policies which might be conceived we shall distinguish two polar extremes: the first we shall call the policy of permissive control, and the second the policy of totalitarian control. In the first, there is a minimal amount of direct and overt control of labor by government. Workers may establish friendly societies, organize trade unions, and form political parties. The effectiveness of these independently created working-class institutions, however, is limited by a legal environment which is hostile to collective labor action, either because it circumscribes the use of labor's offensive weapons--the strike, picketing, boycott--or because it discriminates in favor of private groups--for example, employers--who have an interest in attenuating labor's organized strength. But such a policy is permissive in that within the constraints of the legal environment labor organization can develop independently of the government. Membership of trade unions can increase, and as their numbers and financial strength become greater they may even exert pressure on government in order to obtain favorable changes in the legal environment.

In the second type of policy, and at the opposite pole from the first, there is a maximum amount of direct and overt control of labor by government. Workers have little opportunity for independent expression of discontent. If they belong to working-class organizations these are dominated by officials whose purpose it is to train workers to the tasks and discipline of industrial production and who accordingly do not serve the function of articulating discontent. Further, workers are prohibited from organizing independent unions and political parties. Where under a policy of permissive control, independent enclaves of labor power may develop in the interstices of the legal system, under a policy of totalitarian control there is no opportunity for such a development.

Intuitively, one can see that the eventual emergence of democratic society is more consistent with the first type of policy than the second and consequently some importance attaches to the conditions which incline a society to the use of one or the other. In a formal sense it is easy to indicate what these conditions are. Other things being equal, the use of a policy of permissive (totalitarian) labor control is more likely (1) the greater (less) the strength of the conditions inducing workers to resolve their discontents by striving as individuals to acquire the rewards offered by the industrial system, and (2) the stronger (weaker) the conditions which deter the collective articulation of labor discontent. Permissive labor controls are then feasible (but not inevitable) because the autonomous and spontaneous actions of individuals do not interfere with the achievement of desired rates of economic growth, rendering stronger governmental controls redundant (from the point of view of maximizing this particular goal of governmental policy).

In the next section we shall try to give these conditions substantive content by examining some factors in the experience of industrialization in Great Britain, Germany, the United States, and Soviet Russia.

II. The Sequence of Industrial Development of the Western World

The industrial revolution which started in England in the second half of the 18th century and transformed British society in the succeeding 75 years set afoot economic processes which were picked up in Germany and the United States towards the middle of the 19th century with even greater intensity. The industrialization impulse, however, became attenuated as it moved eastward through Europe, and although Russia experienced a quickening of economic activity in the 80's and 90's, it was not until after the Revolution of 1917 that it embarked on a sustained period of industrial development. It is apparent that in this developmental sequence England, the United States, and Germany pursued relatively permissive labor policies while the Soviet Union pursued totalitarian policies. In Great Britain, for example, in the period from 1780 to 1850 the ruling classes established a legal and political environment which, while permitting trade unions and political action groups to exist as independent entities, inhibited their development. From the Napoleonic Wars to the middle of the 19th century unrest among the laboring population was endemic, breaking out periodically in rioting, strikes, and Chartist demonstrations. The government met these threats to social order through a judicious combination of repression and concession, which allowed workers enough scope to organize but not enough to shackle the accumulation efforts of the entrepreneurial classes. The Combination Acts were repealed in 1824 and then partially reimposed the following year. The Chartists were allowed to petition Parliament for political reforms, but their petitions were denied. Factory legislation

controlling hours of labor was passed, but at the outset not rigorously enforced. The administration of the Poor Laws was made more efficient, but more punitive than it had been under the Elizabethan dispensation.

Similarly, in the United States and Germany the growth of labor organizations was delayed by a hostile legal environment. With regard to the specific kinds of control exerted on labor there was, of course, much detailed variation. Where in American the collective activities of workers tended to be restrained by judicial interpretation of common-law prohibitions against combination, German workers were restrained by the positive enactments and edicts of the political authority, as, for example, the Bismarckian anti-socialist laws. Notwithstanding the specific differences in the legal systems in the United States and Germany, as well as the differing extent to which political rights had been granted workers in the two countries, they both had an affinity with the permissiveness of British labor policy. One might quarrel about the order in which these countries should be ranked in relationship to the permissive pole of a control spectrum, but there was no doubt that in each labor organizations were eventually able to overcome the obstacles in their way and grow into strong independent groups.

In contrast, Soviet authorities, upon the inauguration of the plan era in 1928, made the trade union movement wholly subservient to the interests of the state. Although proclaiming welfare goals dedicated to the interests of the workers, the Communist Party did not permit organizations of workers to have independent power to influence them. While denying labor the right to strike and the right to form political action groups in opposition to the government, however, the Communist Party tried to give workers a sense of participation in the building of the new Soviet world. The administration of social security by the trade unions, the discussions by workers at the plant level of production targets set by the planning authority, the encouragement of open criticism of the lesser administrative officials in the bureaucracy, the rewards for innovations increasing productivity and similar policies were all designed to allay the discontent of accelerated industrial growth by identifying the workers with the production objectives of the high command of the Communist Party.

The differences in the labor policies of the Soviet Union and the countries to the west can, of course, be explained in terms of the different ideological and national traditions involved. The Soviet amalgam of Marxian teleological belief and of Russian messianic fervor, for example, may be said to have led to the formation of policies which denied the existence of the individual apart from the collectivity--the social welfare function took precedence over individual preferences. In England, on the other hand, libertarian ideology and constitutional traditions combined to predispose policy-makers in favor of the individual vis-a-vis the collectivity--individual preferences took precedence over the social welfare function. However valid such an explanation may be, and it certainly is relevant to the issue, it is our intent to seek out a hypothesis in the realm of economic phenomena. We want to ask whether the passage of historical time so affected substantive economic conditions that the potential for individual solutions to labor discontent as well as the deterrents to its collective articulation became progressively weaker, creating a situation where strong governmental controls of labor became the necessary price for achieving accelerated rates of economic growth. We shall first examine the impact of resources and technology on production and want formation and then the impact of population changes on the organization of the labor force.

The Impact of Resources and Technology on Production and Want Formation

Given the level of technology, the more accessible natural resources, the better their quality, and the more favorable their relative location, the easier it will be for an economy to take advantage of the external economies contingent upon their development. But in historical situations the level of technology is not given and its state relative to natural resources and labor is of first importance in understanding the character of industrial development. Obviously, it must be far enough advanced to permit the growth of an industrial economy. Without steam power and its adaptation in industry and transport, the industrial revolution could not have taken place. On the other hand, if technology is too far advanced, it may inhibit industrial growth by creating external economies that cannot be easily appropriated. No respecter of national or natural frontiers, technological progress attributable primarily to the pioneer efforts of one country becomes the heritage of the entire world. Further, international trade transmits the cost-reducing effects of technological advance wherever goods and services are sold in organized markets. The country with a good resource endowment which fails to develop during the steam age, for example, will find greater indivisibilities blocking its path of development in the electric or atomic age. And because of the international impact of technology, it would be uneconomic for these countries to gear their economies to a technology which more advanced countries were in the process of discarding.[12]

This suggests that there is a period of optimal technological development for maximizing spontaneous individual participation in the utilization of an economy's natural resource endowment, or, to put it in other terms, for maximizing competitive organization and small units of production. Beyond some point, the development of technology makes it increasingly difficult for individuals acting on their own initiative to organize the productive forces of an economy because

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12. This statement requires some defense, for it implicitly takes a position in a matter involving conflict between the goals of equilibrium and development. According to equilibrium analysis, an economy maximizes its advantage by making adjustments among existing economic variables which will equalize at the margin the productivity of resources employed by firms and the utility of goods and services consumed by households. It is entirely possible, however, that by ignoring the optimal equilibrium position, indeed moving away from it, new supplies of resources can be developed which will increase the level of per capita income above that which would have prevailed in the old equilibrium. Maurice Dobb, Soviet Economic Development since 1917, New York, 1948, pp. 2-11; Kenneth E. Boulding, "Welfare Economics", Survey of Contemporary Economics, Vol. II, B. F. Haley, ed., Homewood, Ill., 1952, p. 27; Peter Wiles, "Growth versus Choice", Economic Journal, Vol. LXVI, June 1956, pp. 244-255. This conflict between equilibrium and development may be particularly sharp if society is confronted with a choice between different technologies, requiring different levels of educational attainment on the part of the labor force. To put it crudely, why give tractors to peasants who are only capable of handling plows? The question can only be answered negatively by equilibrium criteria. By developmental criteria, however, one might defend such a policy in terms of training a labor force up to the mechanical skills of an industrial order, recognizing that in the short run it may be uneconomic.

investment indivisibilities and related external economies of growth increase the size of the optimal firm or because the fund of knowledge required to organize and operate firms increases. In either case managers and entrepreneurs will become further separated from workers, making it more difficult for the values and motivating goals of the former to be disseminated among the latter. In short, advancing technology increases the height of the capital and knowledge barriers which entrants into industry must surmount, thus restricting the scope of competition and the individualistic response to labor discontent.

Great Britain and Soviet Russia offer some instructive contrasts in these regards. Lying just off the northwestern corner of the European continent, favored by a mild and damp marine climate, and standing athwart the sea lanes between northern Europe and the rest of the world, Great Britain possessed incomparable locational advantages which were turned to good account after the voyages of discovery opened the oceans to commerce. Even before the start of the industrial revolution, England was the world's foremost commercial nation, a position for which the trading and entrepreneurial middle classes were in no small degree responsible. These locational advantages which were so favorable to Britain's external trade were further enhanced by natural conditions which stimulated the growth of the British internal market. The compactness of the British Isles and the abundance of natural resources, e.g., coal and iron ore, as well as their relative location minimized effective transport distances. It was not fortuitous that the world's foremost trading nation should become the world's first industrial nation. Nor was it fortuitous that there was relatively widespread participation in the industrial metamorphosis, for the price of being first was the absence of guides and the concomitant necessity of feeling one's way along by a process of trial and error. Indeed, it was only possible for the industrial revolution to take place initially in some society where resources were abundant and afforded opportunities for many people to make many trials and many errors in their utilization. Growth under competitive conditions was the sine qua non for the discovery of the industrial order.

Moreover, since the technological possibilities for the production of any particular type of output in the period between 1760 and 1840 were limited, there were limits to the extent to which resources could be locked up in investment projects. A pioneer economy such as that in Great Britian inevitably wasted resources by going down blind alleys, but, as compensation, the indivisibilities of investment did not become so large relative to national income that growth preempted an excessively burdensome share of current output while delaying the realization of increased future output.

In contrast to the British economy, the Soviet economy, although rich in natural resources, was not particularly fortunate in its relative location, nor did it possess a good natural transport system. Consequently, the costs of moving resources to production nodal points and then to consuming markets were prohibitive. When the Soviet Union embarked on an accelerated industrialization program in the late 1920's in order to develop these resources, it found itself confronted by a wide range of technological possibilities, some necessitating capital-intensive investment and others labor-intensive investment. Should heavy or light industry be emphasized? Should rail transport be powered by steam engines or diesel engines? To what extent should hydro-electric power be substituted for the other sources of energy? These questions and thousands like them could be asked in the Russia of 1925, but they could hardly be asked in the England of 1760. The

mere existence of an advanced technology in the more developed economies in the west placed Russia on the horns of a dilemma. If they proceeded according to neo-classical optimality criteria and maximized output from currently available resources, they would have developed light industry and utilized labor-intensive methods of production; but then they might not have been able to accelerate the rate of growth enough to reduce the gap between their own economic strength and that of the more mature economies in the west. But if they tried to leap the technological gap and adapt the capital-intensive production methods of the west, they would perhaps accelerate the future growth of new supplies of resources, but at the cost of a repressed labor force and of limited opportunities for spontaneous participation in the organization of production.

If Great Britain faced peculiar problems as a pioneer and Russia experienced severe difficulties in assimilating lumpy and indivisible productive techniques, Germany and especially the United States found themselves in the most favorable position of all from this point of view. Following close upon the heels of England's industrial revolution, they did not have to bear the cost of breaking through to a new technological frontier, nor were they tempted by a technology inappropriately complex for the skills and excessively covetous of current supplies of resources. Here a premium existed on the adaptation of known techniques whose impact on costs and output were predictable. Entrepreneurial energies were absorbed in the exploitation of their natural advantages, Germany with its incomparable central position on the North European Plain and ready access to the resources both of western and eastern Europe, and the United States with its unexploited virgin lands. The industrial labor force in these countries thus took shape at a time when the level of technology did not place insuperable obstacles in the way of the individual worker who had entrepreneurial ambitions to participate in the exploitation of natural resources. It was possible to acquire the knowledge and skills needed in the organization of production by observing the process as a worker, a learning method which became ineffective when advancing technology, through its impact on the division of labor, placed production processes beyond observation. An awareness of the relative ease with which workers could learn the new techniques of the mechanized textile industry induced the British, for example, to continue the futile practice of prohibiting the emigration of skilled mechanics during the greater part of the industrial revolution. By the same token, German and American firms, which adapted the new manufacturing techniques and trained a labor force to utilize them, had to suffer the loss of workers who struck out on their own.

The advantages which accrued to the economies first industrializing from the possibilities of spontaneous participation in the organization of production were matched by equally important advantages obtained in the formation of wants. Just as technological development cannot be sealed off from a country by national frontiers, so the influence of industrial development on preferences cannot be confined to the country of original growth. While instrumental in motivating workers to become part of an industrial labor force, the demonstration effect may shape preferences for industrial standards of living in advance of the likelihood of attaining these standards. Especially if the communication system is highly developed, it is possible for the wants formed on one country in a given stage of industrialization to be transmitted to another less advanced country. In that event discontent may well be intensified by the creation of expectations which can only lead to frustration.

Great Britain clearly had minimal difficulties in this connection. As the first nation to pass through the industrial revolution, it could not constantly have before it the example of a more highly developed economy which it was trying to emulate. Moreover, the classical industrial revolution had its primary impact on the production of existing output through technological changes in transportation and manufacturing processes. The output of cotton textile goods was expanded and larger amounts of agricultural commodities, for example, were moved from the farms to the cities. In short, the industrial revolution in Great Britain was a response to preferences for historically given wants. The labor force, therefore, was motivated in terms of these wants and could not be irritated by a consciousness of a more dazzling standard which similar groups in other countries had attained.

Similarly, Germany and the United States were not hampered by an invidious comparison with more advanced countries. In the first place, since their industrial revolutions took place in the same technological era as that of Great Britain, they were responding essentially to the same set of wants. In the second place, it was not unequivocally clear that the standard of living of the British workers was particularly desirable,[13] and it certainly was not significantly higher

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13. The standard of living of the British workers during the industrial revolution has been a perennial favorite of economic discourse since the start of the revolution itself, and from the very beginning there have been sharp differences of opinion about whether it rose, remained the same, or fell. That there was such a controversy, of course, was significant, for prior to the industrial revolution it never occurred to anyone that workers could get anything more than subsistence. Contemporary investigators of the problem tended to be anecdotal and to base their judgment on fragmentary evidence. Not surprisingly, then, their views varied from the pessimism of F. Engels in his The Condition of the Working-Class in England in 1844, London, 1892, to the optimism of A. Ure in his The Philosophy of Manufacturers, London, 1835. Subsequently, Karl Marx gave the controversy added piquancy by generalizing the evidence drawn from the reports of Royal Commissions, Poor Law Commissioners, and factory inspectors on the state of the workers into his famous immiserization (verelendung) hypothesis.

Ever since, the battle lines have been drawn, and if Marx was aided and abetted by the work of A. Toynbee (Lectures on the Industrial Revolution in England, London, 1884) and the Hammonds (The Village Labourer, 1760-1830, London, 1911; The Town Labourer, 1760-1830, London, 1920), he sustained very severe blows from the work of A. L. Bowley and G. H. Woods (their articles on wages appeared intermittently in the Journal of the Royal Statistical Society from 1898 to 1906) and J. H. Clapham (An Economic History of Modern Britain, I, The Early Railway Age, 1820-1850, Cambridge, 1926). Today, the issue is still with us, though on less of a polemical plane. Recently T. S. Ashton tentatively affirmed the notion that the standard of living of the British workers rose in the period following the Napoleonic Wars; "The Standard of Living of British Workers, 1790-1830", Journal of Economic History, Supplement IX, 1949. E. J. Hobsbawm, however, has published some indices of food consumption by workers during this period which cast some doubts on the validity of Ashton's position; "The British Standard of Living, 1790-1830", Economic

than that of the workers in the United States or Germany, even though Great Britain had had a head start in industrial development. Indeed, in Germany the British example, far from being extolled, was calumniated as the frightful outcome of Manchesterian individualism. From the start of its industrial revolution, Germany was exercised by the Arbeiterfrage and looked to Great Britain for just those conditions it should avoid in its industrial development.[14] The preferences of the German workers could hardly have been influenced by the standard of living of the British workers.

By the time the Soviet Union undertook to accelerate the rate of industrial growth, however, a new technological era had dawned in the west, and the western economies were, in addition to satisfying the historically given wants, producing new types of commodities which were creating new types of wants. The Soviet Union was attempting to jump the subsistence gap at a time when durable consumers' goods, particularly in the United States, were coming to be the symbol of the material strength of the western economies. Furthermore, the continued growth of communication media, the invention of the radio and motion pictures, made it technically possible to transmit the word and image of this material strength with great rapidity to any part of the world. The disparity between the standard of living of the labor force in western economies and in Soviet Russia being great by any measure, the Soviet worker was especially liable to the discontent which can rise where wants increase faster than the capacity of the economy to satisfy them.

History Review, 2nd Series, X, August 1957, pp. 46-68. W. Arther Lewis has suggested that the average standard of living of the workers could have risen in Great Britain, provided workers were moving from the subsistence sector into a capitalistic sector that offered higher real wages, even though the latter might not have changed significantly over time. This, of course, leaves open the question of what happened to the standard of living of workers in the capitalist sector. "Unlimited Labour: Further Note", The Manchester School, XXVI, January 1958, footnote, p. 21.

14. There is a striking contrast between the typical views of labor held by British and German writers in comparable early stages of their industrial development--Great Britain, say, in the last quarter of the 18th century, and Germany in the middle of the 19th century. Mercantilist thought, of course, was still very much alive in Great Britain at the end of the 18th century, and the representative Mercantilist was extremely apprehensive about the effect on productivity of wages higher than subsistence. Arthur Young has been quoted so often in this connection that it would be presumptive to quote anyone else: "Everyone but an idiot knows that the lower classes must be kept poor or they will never be industrious"; The Farmer's Tour through the East of England, London, 1771, IV, p. 361. This view of labor, however pragmatic, is, to say the least, harsh. In Germany, on the other hand, around the middle of the 19th century, there were apprehensions about how the industrial worker, just beginning to appear in Germany, could be integrated into society. In other words, the kind of problem that concerned Disraeli, Carlyle, the Tory Radicals, Shaftesbury, and others in England at the end of the industrial revolution was a matter of major concern to German intellectuals and politicians at the beginning of their industrial revolution.

Population Changes and the Organization of the Labor Force

Two types of population change affect the formation of the labor force: (1) changes in total population, and (2) changes in the location of the population. Total population has a direct bearing on the size of the labor force and consequently on the volume of employment which must be offered by firms in order to minimize the discontent caused by unemployment. The industrialization of the western world in the late 18th and 19th centuries brought forth a dramatic increase in total population as death rates declined relative to fertility rates. Increased output in conjunction with improved medical knowledge and standards of public health allowed society for the first time to bring under control many of the dread diseases which for centuries had been destroying life, especially the very young. The ameliorating influence of these forces on death rates, however, took effect before the dynamic forces of urbanization, which also accompanied increased output, brought down fertility rates.

The detailed picture of population growth in England, Germany, and the United States during their respective industrial revolutions of course varied, and there can be considerable debate over the proximate cause of the short-run changes in population.[15] Moreover, one would be hard put to assign causative priority to output increases or population increases in explaining the long-run growth in per capita income in any of these countries. Both had their part to play: population growth stimulated the demand for output, and output growth permitted a sustaining of a larger population. For our purposes, however, the important point is the close interrelationship between the two variables and not the direction of causative influence. In all three countries output rose more than population, and one can therefore assume that the potential volume of employment was large enough to prevent a secular growth in unemployment. If with the onset of the industrial revolution in these countries, employment became cyclically more unstable, potentially at least it was possible to attain a higher degree of full employment.

Where in England, Germany, and the United States population increases and output increases went along hand in hand, in Russia population increases preceded output increases, creating a problem of overpopulation. While the industrialization impulse which triggered the economic expansion in western Europe became more feeble as it moved east from Germany, the impact of this impulse on death rates did not. Consequently, in the last half of the 19th century the rural population in Russia increased beyond the capacity of the urban economy to absorb it. Although the population declined in the holocausts of World War, Revolution, and Civil War, it once again increased during the 1920's in the period immediately preceding the plan era. Unemployment therefore was endemic in the early Soviet economy and a problem that could not escape the attention of the policy makers.

The unemployment problem, of course, was not something new in European history. England, for example, had had to cope with it for centuries, and prior to the industrial revolution had evolved in the Poor Laws a crude kind of unemployment compensation to assuage its effects. But the acceleration of the rate of

15. See, for example, H. J. Habakkuk, "English Population in the Eighteenth Century", The Economic History Review, 2nd Series, V, December 1953, pp. 117-133.

growth of output after the turn of the 19th century afforded the British government an opportunity to impose the responsibility for employment on the individual by making the Poor Law Administration so harsh that the individual would turn to it for relief only in the most dire circumstances. Short of the workhouse, then, the individual worker was officially left to his own resources. In Russia, however, where population expanded ahead of output, to leave the individual worker to his own resources might have been too dangerous an alternative, given the goal of accelerated economic growth. The techniques of organizing labor discontent had become well known by virtue of the painfully acquired experience of the advanced economies in the west. An unattended Russian labor force suffering from unemployment would have found willing champions among dissident intellectuals steeped in the history of the labor struggle. And if they had been able too quickly to form an independent Russian labor movement, the capacity of Soviet authorities to expand the investment surplus might have been restrained. Hence, the domination of Soviet trade unions by the state.

Aggregate population changes in relation to output changes determine the potential volume of unemployment which may be inflicted upon an economy. The extent to which this potential is realized, of course, depends upon the proportion of the population which forms the labor force, that is, upon the distribution of the population between males and females, the age structure of the population, the ratio of agricultural to non-agricultural labor, and so on. But given some unemployment potential and the other sources of discontent in accelerated industrial growth, the reaction of workers will depend on their capacity to move. We have already suggested that one way workers may respond to discontent is by internalizing industrial values and by trying to move up the status hierarchy to a position where their discontents are not so pressing. Vertical movement is one possible response; horizontal movement is far and away the more important response.

The individual who is beset by present discontents which arise out of his immediate job environment may attempt to resolve them by seeking new employment in the same community, in another community in the same country, or in another country. The feasibility of such movement depends upon the availibility of (1) employment opportunities in the new community, and (2) reasonably cheap means of transport. Where both these conditions are satisfactorily fulfilled and population movement takes place both within a country and among countries, industrial discontent is, in a sense, dissipated, or, otherwise put, spread thin so that it becomes more difficult for dissident leaders to act upon it. Emigration, for example, allows the discontented to escape from oppressive economic circumstances and try their luck elsewhere, thus relieving one economy of possible "troublemakers". But as immigrants in a new community, these same people may find that they are a disadvantaged social group within the labor force, who are unable to express very effectively their discontent. Their disabilities will be greater, the greater the ethnic, religious, or national differences between themselves and the indigenous workers, for it will then be that much harder for the former to enter the councils of the latter. In other words, a heterogeneous labor force leads to divisions and antagonisms among workers which debilitate the energies of an incipient labor movement in internecine conflict.[16] What is true of internation

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16. It was for this reason that the eminently practical Lenin was sceptical about the role of spontaneity, so dear to the hearts of the evolutionary Marxists, in the preparation of workers for the (continued on next page)

population movements is also true, although to a lesser extent, of intranation population movements. Regional differences in the characteristics of labor may be as divisive as national and ethnic differences.

Here again one may note a profound difference between England, Germany, and the United States on the one hand, and Soviet Russia on the other. Where the former industrialized during a period when the vast American public domain exerted a strong attraction on the surplus population of Europe, the latter industrialized after this domain had been largely filled up and the bars to immigration raised. Neither in England nor Germany did the increased output brought forth by industrialization have to bear the full burden of the concomitant increases in population. The high land-labor ratio in the new world at once assured high enough wages and a persistent enough demand to make the American opportunity an attractive alternative to the European. Whether or not the opportunity typically bore fruit in reality, it attracted enough workers in the 19th century to set in motion a strong tide of population from east to west. The composition and source of this tide changed over the course of the century with the changes in transport technology which so dramatically lowered the costs of ocean travel. Because of these changes, it was easier for a German to migrate in the second half of the nineteenth century than it was for an Englishman in the first half of the century. Indeed, one might conjecture that the allegedly more bitter resistance to industrialization among English workers than among German workers was in part explicable by the greater ease with which Germany could shed potential dissidents to America than England.

The United States accordingly became the proverbial melting pot for the populations of Europe during its industrial revolution in the second half of the nineteenth century. As the origins of the emigration shifted from northwestern Europe to eastern and southeastern Europe, the native-born American worker found it increasingly easy to distinguish himself from the foreign worker who neither spoke his language nor understood his customs.[17] The foreigner too frequently became the scapegoat for the problems of the native-born workers who were quick to exclude him from their trade unions and bent on excluding him from the country. Engaged primarily in unskilled labor, divorced from the indigenous population, and not accustomed to or comprehending American representative political institutions, the immigrant suffered from conditions which in other circumstances might have become manifest in a more persistently agitated and effective labor movement. In short, the strains of passing over the threshhold of industrial development were bottled up to a very considerable degree in inarticulate social groups.

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socialist revolution. Because of racial, religious, and other divisions in the labor force, he thought that the spontaneous development of a labor movement would lead to a divided movement. See What Is To Be Done?, Selected Works, Vol. II, Leningrad, 1934, pp. 27-192.

17. Cf. Oscar Handlin, The Uprooted, Boston, 1952; Marcus L. Hansen, The Immigrants in American History, Cambridge, 1940; John Higham, Strangers in the Land: Patterns of American Nativism, 1860-1925, New Brunswick, 1955; and Charlotte Erickson, American Industry and the European Immigrants, 1860-1885, Cambridge, 1957.

In the nineteenth century, then, all developing nations gained some advantages from population migrations because they permitted workers to avoid one set of dissident-creating conditions by emigration, but place them, as immigrants, in a position where they might not be able to do anything about their grievances when the same circumstances once again affected them. But the large population migrations from Europe to America ceased with the outbreak of World War I. When therefore the Soviet Union undertook industrialization, the open lands in the middle latitudes of the west had been pre-empted and even if Soviet authorities had been willing to allow their citizens to emigrate, there was no country which would have accepted Russian immigrants on the scale that America accepted immigrants in the nineteenth and early twentieth centuries.

The internal and self-sufficient industrialization of Soviet Russia necessarily precluded the expression of dissidence by emigration. Since the state planned accelerated rates of industrial growth, outbreaks of unrest and discontent, which might have interfered with the realization of these plans, had to be foreclosed. The state therefore controlled internal population movements on its own terms, structuring wage rates, establishing institutional arrangements between factory and farm, and gearing its educational system to meet the requirements of industrial development. While the population moved at the behest of the Soviet government, the organizations, as we have noted previously, through which workers might have articulated discontent were similarly controlled by the government. Where in the United States the immigrants from eastern Europe had limited voice in the determination of the economic conditions affecting their lives, in Soviet Russia the labor force had no voice.[18]

Summarizing, one may say that in the industrialization of the west the countries which passed through the process early contained a stronger potential for individual solutions to labor discontent than the country which trailed behind because (1) the relationship between technology and resources had not yet erected formidable external-economy barriers to growth which limited individual participation in the organization and production, and (2) population movement from east to west was relatively easy. These same countries also contained stronger deterrents to collective action (1) because the discontent occasioned by accelerated industrial growth was less compelling, reflecting a more tenable relationship between population and want formation, on the one hand, and output, on the other; (2) because of the greater readiness with which discontented individuals could

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18. Strictly speaking, this is not quite correct. In a centrally administered economy which attempts to plan the national output and its distribution among various classes of productive factors, there presumably is nothing for labor to bargain about. The output of consumers' goods, their prices, and the structure of wage rates being given by plan, the standard of living of the workers is determined. However, in the formulation of plans, representatives of workers can, theoretically at least, try to secure greater allocations of resources for the production of wage goods. In Soviet Russia the priorities persistently given to the fulfillment of the capital goods objectives of the plan would suggest either that the Soviet trade union leaders do not have the consumptionist orientation of their western peers, or that, if they do, they have been unable to make an impression on the planners. See Isaac Deutscher, Soviet Trade Unions, London, 1950.

emigrate; and (3) because the barriers confronting the would-be organizers of labor discontent had not yet been lowered by the accumulated experience of industrial labor movements.

Because the industrialization of Russia took place in the twentieth century, following the similar experiences of England, Germany, and the United States in the late 18th and 19th centuries, it found itself with a population which was increasing in advance of output and whose wants were susceptible to the influence of higher western material standards. Yet the potential unrest and discontent could not be dissipated in emigration nor, given the technological impediments to growth, could it be easily sublimated in entrepreneurial and individualistic drives. Moreover, the struggles of labor in the west to organize provided a practical copybook for anyone who cared to direct the discontent of labor toward collective action.

The position of Russia in the historical sequence of industrialization is not a sufficient condition for explaining the policy of totalitarian labor control which emerged during the plan era. It may not even be a necessary condition. Yet it is most suggestive, for the passage of historical time so turned substantive economic conditions against Russia that a policy more permissive in the control of labor might have jeopardized the long-run objective of industrial development. One certainly cannot deny the extreme importance of other factors, for example, the political motive that a monolithic organization like the Communist Party has in preventing the emergence of opposition anywhere in society. But such an explanation of totalitarian labor policy is not a substitute for an economic explanation. Indeed, the two work in the same direction and reinforce one another, a reason, perhaps, that totalitarian authority persists in Russia quite unabated.

III. Implications for the Underdeveloped Economies

Our analysis has led us to suggest that in the western world the sequence of industrial development has been an important factor in influencing the controls exerted on the labor force. In England, Germany, and the United States, the industrial revolution worked itself out within the context of permissive labor controls; in Russia, the industrial revolution was abetted by totalitarian labor controls. Can one then assume that the historical sequence contains a unique ordering of the relevant variables which militates against the use of permissive labor controls in countries attempting to industrialize today? To answer the question affirmatively implies that one believes not only that economic factors now work against permissive labor policy, but that the weight of noneconomic factors is not likely to offset the influence of the economic factors. We are inclined to accept the first proposition; the second proposition cannot be evaluated without careful and profound study of the particular countries in which these forces operate.

Our reasons for accepting the first proposition follow from the analysis of the previous section. The economies that are underdeveloped today did not contain the social-economic ingredients which would have allowed them to participate in the more or less spontaneous industrialization the western world experienced in the late 18th and 19th centuries. In consequence the gap in per capita income between today's developed and underdeveloped economies is greater than it was at the dawn of the industrial era. While the passage of time has not raised the

potential for spontaneous growth in these countries, it has heightened the consciousness of the gap and increased the demand for appropriate policies to close it.

Since a spontaneous basis for growth is so often lacking in underdeveloped economies, the initiative for industrialization, when and if it takes place, must come from government. Given the technical demands of modern industrial capital and the inadequacy of the indigenous supply of entrepreneurship, the government, at the very least, will have to allocate resources to the education of technical, administrative, and professional personnel. In addition, the external economies arising from the social overhead and utilities of an industrial economy are so great that government is likely to be the only unit able to plan and carry out their production. Moreover, the underdeveloped economy, as a recent member of a colonial empire or as a producer of a single export crop or raw material, historically has had a dependent status vis-a-vis the developed economies of the west which can only be broken by a government which is willing to assume the risks of obtaining independent status (or a different kind of dependent status).

However the government responds to these problems, the important point here is that entrepreneurship is not so widespread that it can become a goal capable of sublimating the discontent workers experience during industrialization. If technological and social conditions combine to reduce the opportunities for small and medium-size entrepreneurial operations, it makes it difficult to implant a consciousness of this function, and aspirations to perform it, in the minds of the working population. Workers, then, in the underdeveloped economies of today are not so likely to absorb an entrepreneurial ethic and outlook as were the workers in the United States, for example, during the second half of the 19th century.

The discontent accompanying industrialization will be further aggravated in underdeveloped economies by the strength of the demonstration effect, the increase of population ahead of output increases, and the restrictions on international population movements. The disparity in the level of per capita income between the underdeveloped and developed economies may create a situation in which the workers of the former acquire a taste for the consumption standards of the latter without at the same time accepting the obligations and demands of industrial labor. To long for refrigerators and automobiles is fine when accompanied by internalized drives which induce workers to seek these goods within the limits of the sanctions and rewards of the industrial order. But if these material aspirations are too great for the capacity of workers to make the commitment necessary for acquiring them, they may simply fan the flames of discontent and rebellion.

Since death rates in the underdeveloped economies are elastic and responsive to the medical and public health advances pioneered in the developed economies and fertility rates are quite inelastic, population may increase ahead of output, creating a serious unemployment problem, both overtly in the sense of idleness and covertly in the sense of inefficient utilization of labor. In either event idle hands may be a source of mischief and a tempting lure to dissident labor leaders who for whatever reason want to embarass the constituted political authority. Moreover, to the extent that frontiers are closed and the productive and fertile lands of the world already pre-empted, migration does not offer a solution to the worker who is chronically unemployed. In the twentieth century, population increases must be borne by the output of the country in which they occur.

For the underdeveloped economies of today these economic factors, unfortunately, seem most compelling and likely to engender among workers during industrialization too strong a protest for the security of growth objectives. The need for industrial commitment, therefore, is likely to shape the labor movement in these economies, as social and economic protest dominated western labor movements in the 19th century. Rather than being permissive in the control of the labor force, governments responsible for development are likely to be oversolicitous of its condition and anxious to have a strong hand in guiding its conduct.

The evidence on problems of this sort accumulates very slowly, and it is perhaps too soon to expect confirmation or refutation of any solutions proposed here. Yet the experience of India, which we can only touch on briefly, is not without some relevance. India's leaders are dedicated to the achievement of a greater rate of economic growth within the framework of democratic society. Such dedication, however, is being put to the test by the relentless pressure that the expanding Indian population places on the national product. With little chance to shed its surplus population by emigration, the Indian economy is burdened by an unemployment problem in comparison to which Soviet unemployment in the 1920's pales into insignificance. The industrial labor force, though a small proportion of the total population, has become a focus of the resulting discontent. While the labor force has produced relatively few indigenous labor leaders, there is no lack of leaders from outside the ranks of labor who are willing to take the movement in hand and mobilize its agitational and protest energies. But because of the divisive ideological and political positions of these leaders, the labor movement is far from united. Indeed, the various labor groups--Indian National Trade Union Congress, Hind Mazdoor Sabha, United Trades Union Congress, and the All-India Trade Union Congress--run the gamut of the political and social persuasions of the left and consequently have inherited the difficulties that have always plagued efforts to coordinate the left.[19]

Where the forces making for autonomous growth are strong, a divided labor movement is made still weaker by defections from within its own ranks. In India, however, entrepreneurial values and motives are neither widely held nor respected, and emigration is limited. Workers cannot be expected to seek a way out of their difficulties by individual efforts to move up the economic ladder or to seek new positions in other lands. Not being able to do much about discontent themselves, Indian workers too easily can become the pawns of dissident intellectuals who, while dissatisfied with existing economic arrangements, need mass support for their political and social nostrums. Competition at this level, arising from the disunity of labor groups, can erupt into strikes and political demonstrations that further impede the commitment of workers to industrial labor.

It is understandable that Mr. Mehta, whom we quoted at the outset of this paper, feels so strongly that the political activity of trade unions should be restricted.[20] It is also understandable that the Indian National Congress Party, which holds the reins of political power, should have ambivalent feelings about the role of trade unions in its program of accelerated economic development.

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19. Cf. Charles A. Myers, Labor Problems in the Industrialization of India, Cambridge, 1958, pp. 55-69.

20. See footnote 5 above.

Bound, on the one hand, by the imperatives of such a program, and on the other, by a belief in the welfare state as it has evolved in the tradition of western democratic socialism, the Congress Party faces a mean dilemma. If it pushes hard for development, it may have to restrain its welfare ambitions. If it is too liberal in granting the rights of the welfare state, it may endanger the plans for accelerated growth. But imperatives are stronger than beliefs, particularly, as in this case, when growth holds out the promise of a future in which welfare ambitions can be achieved. It is therefore not surprising that the government has limited the powers of labor to bargain collectively and, in its desire to manage labor protest and union growth, has seemed to favor one labor group--the Indian National Trade Union Congress-above the others. As one student of the Indian labor movement has observed, "when government is forced to take more initiative for economic development in underdeveloped countries today, the labor movement tends to be regarded (by government officials and by some trade union leaders) as an instrument in the interests of the whole nation, rather than as a class group."[21]

India has pursued a relatively permissive policy of labor control, but, given its growth objectives, is finding it inconvenient. As it now moves toward a policy of greater control, will it stifle the democratic impulse historically associated with independent labor movements? To raise the question suggests uncertainty about its answer. Democracy does not spring upon the world full grown. Rather, it evolves gradually in response to persistent demands for the rights of political participation from groups, such as the labor movement, which have been able to maintain independence of ruling authorities. When the latter are compelled to limit sharply the initiative of these groups, the independent democratic impulse may atrophy. India may well develop a viable democratic society, but if so, it will rest more on the devotion of its leaders to democratic ideology than on the pressure and demands of private groups thrown up in the process of industrialization. For the successful emergence of a democratic community, the beliefs of quasi-democratic rulers may be a frail reed indeed to lean upon.

In conclusion, we should point out that since these observations about the underdeveloped economies are based on the experience of industrialization in the western world, they are subject to all the errors that inhere in cross-cultural comparisons. We are not, however, trying to predict the specific form development will take in these countries. We only make the more modest point that the economic conditions confronting them set a formidable barrier in the way of the maturing of any democratic tendencies they may contain.

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21. Myers, op. cit., p. 180. See also M. D. Morris, "Labor Discipline, Trade Unions, and the State in India", Journal of Political Economy, Vol. LXIII, August 1955, pp. 293-308; Ralph James, "Politics and Trade Unions in India", Far Eastern Survey, Vol. XXVII, March 1958, pp. 41-45; and George E. Lichtblau, "The Politics of Trade Union Leadership in Southern Asia", World Politics, Vol. VII, October 1954, pp. 84-101.

RURAL-TO-URBAN MIGRATION IN IRAQ

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Iraq is a laboratory of economic and cultural change, possessing the happy combination of underutilized natural resources and, through oil revenues, abundant funds for their development. This paper is a study of one aspect of that change which is both consequence and catalyst, rural-to-urban migration: the rural conditions which act as the push; the pattern of migration--its volume, origins, and destinations; the nature of the urban pulls; the urban way of life of the migrants; and resultant urban problems. Sources of information include data from the various censuses conducted in recent years, interviews and field trips, and a sample survey made in Baghdad in 1957. [1]

Rural Conditions and the Pattern of Migration

As would be expected a priori from the economic and social dualism which has long characterized Middle Eastern countries, [2] both oil revenues and new ideas have entered Iraq through the cities and have been slow to reach the hinterlands. Thus, although annual national income rose from the United Nations'

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1. The study was made possible by a Grant in Aid of Research for 1956-57 from the Social Science Research Council. The sample survey was planned and administered by the author and Miss Sattoreh Farman of the United Nations Technical Assistance Agency. The interviews were carried out by Miss Farman's staff of social workers of Iraq's Ministry of Social Affairs. In addition to Miss Farman, the author wishes to thank especially Mrs. Suhailah Fettah, an exceptionally able volunteer interviewer, and Miss Frances Pike of the United States Operations Mission to Iraq, who arranged field trips and interviews in Basra and Amara. The author alone, however, assumes responsibility for opinions, expressed or implied, and for any errors in fact or interpretation which this paper may contain.

2. Dualism in Iraq is reflected, for example, in the extraordinary difference between cities and the surrounding countryside which has long persisted and, a more recent development, in the bimodal size distribution of manufacturing enterprise within the cities. Thus, according to the 1954 Census of Manufacture, in Baghdad and its suburbs, small shops employing less than ten workers employed thirty percent of the industrial labor force, and the three largest enterprises with a thousand or more workers employed twenty percent of that labor force, the remaining fifty percent being distributed fairly evenly among enterprises of intermediate size. Iraq, Ministry of Economics, Report on the Industrial Census of Iraq 1954, Baghdad, 1956.

estimate of 85 dollars per capita in 1950 to an estimated 135 dollars in 1957[3] without a corresponding rise in the general price level, the rural level of living increased imperceptibly if at all; in some areas it may have decreased, as rising material standards of absentee landlords induced them to increase their rental shares.

Despite the importance of oil to the economy, Iraq's greatest wealth still consists of land--the same rich alluvium which, when irrigated properly, supported Ur, Babylon, and the Baghdad of Harun ar-Rashid. Recognizing this fact, the Development Board[4] in each of its frequently-revised plans has allocated approximately one-third of its projected expenditures to irrigation, drainage, and flood control. But, conforming to a tendency of planners to concentrate on projects of a palpable and occasionally ostentatious nature and to assume that appropriate institutional change will follow, the Board has allocated only a few percent of its funds to projects intended to rationalize cultivation and animal husbandry. Typical farming practices and village life on the alluvial plain of central and southern Iraq have changed little since Neolithic times, and recent increases in production have been almost wholly the result of expansion of acreage rather than of rising productivity.[5] Although extensive cultivation, using the fallow system, is typical throughout the country, there is a contrast between the alluvial plain and the northeastern mountainous and hilly zone, where agriculture is rain-fed and therefore more precarious, but where individual proprietorships exist, rental shares are lower, and, it must be added despite its doubtful relevance, the people are of different ethnic origins. In this region, where efficiency may be rewarded by increased income, capital investment and occasional innovation can be observed among farmers. Draft animals are better fed and are more likely to be mules than donkeys. The villages are cleaner, the houses more substantial, and the people better dressed. The mud and reed villages of the south, with their irrigation-ditch water supplies and their almost universally illiterate inhabitants, reflect both primitive methods of production and a system of land tenure under which landlords receive more than half of the crop. Doreen Warriner has estimated that the southern landlord takes between three-fifths and two-thirds of the crop if the land is flow-irrigated, and five-sevenths if it is pump-irrigated. In

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3. Assuming population at five million in 1950 and six million in 1957. The 1957 estimate of total national income was made by Dr. K. G. Fenelon, Expert in Statistics for Iraq's Ministry of Economics, and appears in "Development in Iraq", The Economist, Vol. CLXXXIII, London, June 22, 1957, p. 14.

4. The Iraq Development Board is a semi-autonomous agency created in 1950 and entrusted with the disbursal of seventy percent of Iraq's oil revenues.

5. Production of wheat and barley, Iraq's major field crops, increased sixty percent from 1934-38 to 1953-56, but acreage devoted to these two crops increased by approximately the same amount. Montague Yudelman, "Some Issues in Agricultural Development in Iraq", Journal of Farm Economics, Vol. XL, February 1958, pp. 80-81. This article discusses the emphasis of the development program on large capital works and the probable consequences of failure to provide extensive training in farm management.

northern Iraq, she estimates that the maximum share on pump-irrigated land is half the crop, typically ranging from one-eighth to one-quarter in dry farming areas.[6]

Regional differences in rental rates to some extent reflect differences in the cultivators' bargaining position. Throughout southern and central Iraq cultivation is impossible without irrigation; and, as sedimentation gradually raises the level of the land, flow-irrigation must be replaced by pump-irrigation, involving capital expenditure which would be impossible from peasants' incomes. An excess of fifteen inches of rainfall annually in northern Iraq permits a more independent existence. Furthermore, northern tenant farmers coexist with independent peasant proprietors, and there is at least a possibility that a tenant may accumulate enough money to become a proprietor. The relative sparsity of population in northern Iraq also enhances the tenants' bargaining power. Rural population per square kilometer by the largest administrative subdivision (liwa) and by region, computed from the Population Census of 1947, appears in Table 1. Although the variable and sizeable proportion of uncultivable land in the various liwas introduces an arbitrary element, it is certain that man-land ratios are higher in central and southern Iraq than in the north. However, when the ratios are computed as rural population (from the 1947 census) per square kilometer of agricultural holdings (from the Census of Agriculture and Livestock, 1952-53), shown also in Table 1, regional differences are greatly reduced.[7] Population changes through internal migration and natural increase between 1947 and 1952-53 lessen the validity of the latter ratios. To the extent that the southern liwas have been losing rural population, as discussed below, the regional differential in man-land ratios is further reduced. It can be concluded that, although such a differential probably exists, it is less than is commonly believed.

The distribution of proprietorship and the structure of tenure unfortunately are unknown, but an indirect indication is given in the data on size of agricultural holding in the Agricultural and Livestock Census, carried out during the winter of 1952-53.[8] An agricultural holding was defined as "a farm or an agricultural

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6. Doreen Warriner, Land Reform and Development in the Middle East, London, 1957, pp. 137-139. Miss Warriner's estimate of shares in dry farming regions is confirmed by Fredrik Barth, who found that an absentee landlord in southern Kurdistan collects between ten and twenty percent of a cereal crop. Principles of Social Organization in Southern Kurdistan, Universitetets Etnografiske Museum Bulletin No. 7, Oslo, 1953, p. 21.

7. Analysis of variance shows a difference at the ten percent level between man-land ratios in northern and in central and southern liwas based on the total area of the liwas but no significant regional difference for the ratios based on the area in agricultural holdings. See also J. H. G. Lebon, "Population Distribution and the Agricultural Regions of Iraq", Geographical Review, Vol. XLIII, No. 2, pp. 223-228.

8. Iraq, Ministry of Economics, Principal Bureau of Statistics, Report on the Agricultural and Livestock Census of Iraq, 1952-53, Baghdad, 1954.

Table 1. Density of Rural Population, 1947, per Square Kilometer and per Square Kilometer of Agricultural Holdings, 1952-53

Liwa[a]	Location	Rural population,[b] 1947, per square kilometer	Rural population,[b] 1947, per square kilometer of agricultural holdings, 1952-53
Mosul	Northernmost, on Tigris	13	39
Arbil	Northeastern	11	38
Sulaimaniya	Northeastern	18	64
Kirkuk	Northeastern	9	22
Dulaim	Northwestern	4	125[c]
All Northern Liwas		9	40
Diyala	Central	14	42
Baghdad	Central, on Tigris	21	69
Karbala	Central, western	26	242[c]
Hilla	Central, on Euphrates	34	55
Kut	Central, on Tigris	11	42
All Central Liwas		18	58
Diwaniya	Southwestern, on Euphrates	20	59
Muntafiq	Southwestern, on Euphrates	21	72
Amara	Southeastern, on Tigris	13	30
Basra	Southernmost, on Persian Gulf	18	199[c]
All Southern Liwas		18	57
All Liwas		14	50

a. Iraq is divided administratively into 14 liwas, with a total area of 235,733 square kilometers, and three desert zones, with a total area of 208,709 square kilometers.

b. Population living outside of municipalities, including estimated nomadic population.

c. Liwas in which there is substantial intensive cultivation.

Sources: Population Census of 1947; Agricultural and Livestock Census of 1952-53

estate worked or organized as one unit"--only a rough indication of ownership or tenure, because one individual might be proprietor of more than one holding, and one holding might be under the proprietorship of more than one person. The southern liwas generally showed average holdings of larger size than did the northern liwas. Amara, on the southern Tigris, showed an average of 17.2 square kilometers, 34 times the countrywide average and six and a half times the average for the liwa next in size of holding, Kut, Amara's neighbor to the north. Kut and Baghdad liwas shared, approximately equally, two-thirds of Iraq's tractor horsepower. Amara had only about one percent, evidence that mechanization is not the reason for the large size of holding in this liwa which has been the source of much of the migration to cities in recent decades. Rather, as is true throughout southern and central Iraq, the large average size reflects the extent to which Ottoman and Mandate powers, in their attempts to clarify titles and settle nomadi

assigned tenure of semi-collective holdings to the ruling families of the tribes. Some tribal leaders, as in Kut and Baghdad, have used their wealth to introduce mechanization. Others have been content to enjoy the prestige traditionally awarded a landed proprietor, while engaging in consumption lending, grain speculation, and other profitable ventures to meet their rising material standards.

The origins of internal migration show regional differentials. A question on liwa of birth in Iraq's first Population Census of 1947[9] revealed that Amara liwa alone had supplied almost one-quarter of all the Iraqis who were then living outside their liwa of birth. Furthermore, of all the people born in this liwa, over one-quarter were living outside it, as compared to less than ten percent living outside their liwa of birth in the country as a whole. Southern and central liwas showed a higher percentage than did northern ones in this respect. The 1947 data reveal two major destinations, Baghdad, the capital, and the port city of Basra. Eighty percent of the migrants from Amara liwa were living in Baghdad and Basra liwas, fifty percent of them within the city limits and most of the remainder in contiguous villages.

The Housing Census of 1956, when analyzed in conjunction with the 1947 census, casts further light on the volume and direction of internal migration.[10] Despite substantial natural increase,[11] most of the southern liwas showed a net reduction in population, while all northern liwas showed a net gain. Basra alone in the south evidenced a substantial gain, undoubtedly because of migration to Basra city. The destinations of the majority of migrants between 1947 and 1956 appear to have remained the cities of Baghdad and Basra, which grew from some 600,000 to 800,000 and 120,000 to 175,000, respectively. The rapid expansion of industry and trade in both of these cities, the glamour of Baghdad, and the proximity of Basra to the southern marshlands, wherein much of the migration originates, explain their importance as destinations. Kirkuk, adjacent to the largest oil installations, reflected the expansion of oil production during the

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9. Data from the Census of 1947 are published in detail in: Iraq, Ministry of Social Affairs, Directorate General of Census, Census of Iraq 1947, Baghdad, 1954, 3 volumes, and are summarized in the Ministry of Economics' yearly Statistical Abstract.

10. Iraq, Ministry of Economics, Principal Bureau of Statistics, Housing Census of Iraq, 1956, Baghdad, 1957. Both the Population Census of 1947 and the Housing Census of 1956 were attempted complete enumerations, the major difference in coverage being the omission of institutional populations in the latter. To correct for this difference, the author added five percent to liwa totals and ten percent to urban totals in the 1956 data. It was necessary to redefine the boundaries of the cities of Baghdad, Basra, and Kirkuk in the 1947 data to correspond with the 1956 definitions, which included a number of villages and suburbs. Because of the questionable precision of these two enumerations and the heroic assumptions necessary to render them commensurable, conclusions therefrom should be regarded, at best, as rough approximations.

11. See the author's "Current Population Trends in Iraq", by Doris G. Adams, Middle East Journal, Vol. 10, Spring 1956, pp. 151-165, for an argument that the rate of natural increase has recently accelerated through declining mortality.

nine-year period, growing from 75,000 to 100,000. Mosul, on the northern Tigris, lost her place to Basra as the second city in Iraq, increasing from 135,000 to only 155,000.

The Asima Sample

In an attempt to determine the nature of the push and pull factors relevant to rural-to-urban migration in Iraq, the author conducted a sample survey in the early months of 1957. Four representative sections of Baghdad and its immediate suburbs known to contain a high percentage of migrants were selected, and in each section four percent of the houses were entered and the inhabitants interviewed. It must be emphasized that the survey findings are representative of only a certain kind of migration. Migrants from northeastern Iraq or from other cities do not settle in semi-rural villages, but rather choose to double up in substandard tenements in old sections of the city if their incomes are limited. For example, it is known that there has been a sizeable movement of Kurds to Baghdad and that they tend to conglomerate in certain quarters of the old city. However, the survey is relevant to the largest volume of internal migration: that of former peasants from the irrigated farming areas and marshes of central and southern Iraq to the major cities, where they construct villages in hitherto empty lots and seek urban employment.

The schedule, which was in Arabic, included questions on household composition, liwa of birth, year of moving to Baghdad, number of former moves, former occupation, reasons for moving, present occupation, daily earnings, and family income, type of housing, number of rooms, utilities and possessions, forms of recreation, literacy, a subjective comparison of present and former living conditions, and a statement of the family's major needs.

If it has no other value, the survey was instructive methodologically in furnishing a veritable museum of difficulties involved in such investigation in a predominantly pre-industrial society. Interviewing was done by female social workers who were taught survey-taking on the job--whence the greater reliability of results as the work proceeded. Because they were college graduates, they tended to believe that they knew the answers better than did those they were interviewing; close supervision reduced, but did not eliminate, systematic errors from this source. The highly personal orientation of tradition-directed people caused the interviewees to speculate as to our ulterior motives, with the resultant bias probably depending upon their most likely hypotheses (which ranged from conscription and taxation to planning their resettlement in model communities). Physical difficulties abounded, caused, for example, by the haphazard arrangement of the settlements and the absence of maps, necessitating much care to avoid omission and double-counting, and by the impassability of certain sections for several days following each rain, with the result that the data are not even theoretically simultaneous.[12]

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12. Two further examples will illustrate the variety of troubles encountered: Watchdogs are kept by almost every village family, and while all of them are conditioned by mistreatment to be savage, some are more savage than others. The author might argue, in rationalization for occasionally having taken a house beside the one drawn, that the (continued on next page)

Definitions were troublesome and had to be changed ad hoc when it appeared that the interviewers were not adhering to them, with consequent incommensurability between the four sections covered. As they finally evolved, house was defined as any arrangement of dwellings having a common outside door. This definition was useful in eliminating the necessity to enter each courtyard, but has little analytical value. The poorer the section, the greater the ratio of reed to mud houses, and, because reed houses are seldom enclosed by mud walls, the fewer the number of multi-family houses. Therefore the results are given by family rather than by house. When a multi-family house was drawn, all the families were interviewed, and a separate schedule was made for each. Family was defined as a group of people cooking and eating as a unit. In all cases the members were found to be related by blood. In most cases the families in multi-family houses were relatives, and the houses were frequently grouped according to tribe. A migrant was defined as one born outside Baghdad liwa. The unfortunate exclusion of those born in rural portions of Baghdad liwa was necessary because of the difficulty in distinguishing between transitional villages suburban to the city and truly rural ones in which the majority are dependent upon agriculture. A migrant family is one in which the head was born outside Baghdad liwa.

Of the four areas covered, the last and largest, the Asima,[13] yielded the most reliable and significant results: reliable because by then the definitions had evolved in their final form, the interviewers were thoroughly acquainted with their jobs, and those entrusted with selecting the sample had developed a technique of counting which minimized error; significant because the Asima is the most homogeneous of the four areas, consisting entirely of substandard huts and containing the highest proportion of migrants. More than the other three, it is culturally and physically similar to the extensive hut settlements in and around Basra city, second only to Baghdad as a destination of internal migration.[14] For these reasons only the Asima results will be detailed.

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temper of dogs is distributed in a random fashion, but the truth is that she could not ask an interviewer to enter a house when she herself would not.

A month of rain, during which work was possible on only a few days, was followed by the month of Ramadan, when devout Muslims fast from dawn to dusk. The majority of the interviewers were fasting and therefore had to be excused from such strenuous work, and it was only with the greatest difficulty that enumeration was completed.

13. The Asima means "the capital" and has two possible derivations. It may be a shortening of the full name of the settlement, Arasat al-'Asima, meaning public land belonging to the municipality of Baghdad. Or, because many migrants to Baghdad settle here first, it may be derived from their stated destination. The Asima sample, with 259 families and 1,360 people, was as large as the other three samples combined. They were: Sarrafiya, on the east bank of the Tigris just north of the north gate of old Baghdad and now in the center of the city, fifty families with 264 people; Washash Village, on the northwestern edge of Baghdad and across the creek from the town of Washash, 88 families with 484 people; and Tel Muhammad Village, to the southeast of Baghdad partially surrounding the public housing settlement of Tel Muhammad, 108 families with 544 people.

14. According to the Population Census of 1947, forty percent of Basra city's population lived in huts rather than in houses of (continued on next page)

The physical setting of the Asima is described by Dr. Critchley, Professor of Public Health and Social Medicine at Iraq's medical college. He reported that:

> This area was the waste land to the East of the bund which surrounds Baghdad, and it was a desert site studded with pits of varying sizes, which have been produced by the excavation of mud and clay for building purposes. The area was also used by the Municipality as well as private individuals as a dumping ground for human and animal excreta, and rubbish. In addition the few surface water drains in the East of the city are pumped over the bund into this area, just after receiving the washings from the city abattoirs. The polluted and foul smelling liquid, which formed a sizeable stream, wound its way through the conglomeration of mud buildings... There were no sanitary arrangements in the houses or in the district, hence the inhabitants simply defecated indiscriminately, adding their small contributions to the already grossly polluted ground.[15]

Physically isolated by the dyke which protects Baghdad from flood waters, the Asima is a world in itself, its major ties with the city being through the labor market. It has its own bazaar, composed of tiny mud and reed stalls, where lengthy bargaining takes place over foods rejected by downtown markets. It is more noticeably tribal in culture than are slums which are in closer contact with urban influences: most young girls are put in the black cape and headdress, to shield their charms from male eyes, several years before puberty; the cosmetic kohl is commonly seen around their eyes; and much of the dowry is spent on gold jewelry, as in the marshlands from which many of them came.

Doreen Warriner, visiting the settlement in 1955, estimated its inhabitants at 40,000.[16] Our sample rendered 259 families with 1,360 people, an estimated 34,000 for the Asima as a whole. It cannot be stated with certainty whether the large discrepancy reflects underenumeration in our survey, an overestimation by Miss Warriner, a difference in definition of boundaries, or a change in population between 1955 and 1957. Our findings on household composition, although obscured somewhat by faulty definitions, substantiate the hypothesis that most of the migration is in family groups, a husband, wife, and their children composing the typical family of five to six persons. Some unattached relatives and married sons with their wives and children were found as parts of larger families; but, as the Census of 1947 proved, the ease with which a mud or reed hut can be constructed causes the size of family living in huts to be considerably smaller than that in houses of more permanent structure. The population was classed in three age groups: preschool (under 6), school age (6-12), and potential labor force (13 and over). These findings by sex appear in Table 2. Some underenumeration of males of draft age

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permanent construction, as compared to only about thirteen percent (representing a larger absolute number) in Greater Baghdad. Migration to Basra has been far more important, relative to its size, than has migration to Baghdad.

15. A. Michael Critchley, "Observations on a Socio-Medical Survey in Iraq", Journal of the Iraqi Medical Professions, Vol. 4, June 1956, pp. 71-72.

16. Warriner, op. cit., p. 181.

can be presumed, but the strikingly large percentage of the population composed of young children is very nearly correct.

Table 2. Population of the Asima Sample by Age and Sex

	Males		Females	
Age group	Number	Percent	Number	Percent
Under 6	185	13.6	189	13.9
6 - 12	95	7.0	124	9.1
13 and over	353	26.0	414	30.4
Total	633	46.5	727	53.5

57 percent of the people in the Asima sample had been born outside Baghdad liwa, despite the high percentage of children. Of the 771 migrants, 600, or 78 percent, were from Amara liwa, and another 111, or 14 percent, from Kut liwa. It will be recalled that the average size of agricultural estate is greater in these two liwas than elsewhere in Iraq. Moreover, Kut is Baghdad's immediate southern neighbor. Another 29 migrants, or five percent, from Diyala liwa adjacent to Baghdad on the east brings the total from these three alone to 97 percent of the migrants. The southwestern liwas of Muntafiq and Diwaniya are known to have experienced a recent exodus of rural population but contributed only thirteen people to our sample; the destination of migrants from the southern Euphrates is Basra.

In 208, or 80 percent, of the 259 families, the head had been born outside Baghdad liwa. Ninety-four percent of these migrant heads reported having moved directly to Baghdad without an intermediate stop. Only one migrant head reported having returned to his liwa of birth since his arrival in the capital. Two hundred and four of the 208 said they desire to remain in Baghdad permanently. Forty-two percent of the migrant heads had come in the last five years. Some 88.5 percent of them had been landless peasants (fallah) before their move and an additional 2.4 percent agricultural foremen (sirkal), bringing the total who had been employed in agriculture to over ninety percent. None had been landed proprietors. The remainder had been in the army or engaged in commerce or unskilled labor.

When asked why they had left their place of birth, the interviewees gave eloquent answers which, however, proved impossible to tabulate. Some of the common reasons were: "we did not have enough to eat", "our sheikh did not give us enough to eat", "hunger", "oppression by the sheikh", "dispute with the sheikh over the size of our share", "we could not get enough water for our crops", "our land was flooded", "the crop died", and "the army moved us". Classifying the answers as involving a dispute with the sheikh or as natural, financial, or other reasons proved to be arbitrary, for "hunger" could be caused by a rapacious sheikh or by soil salination or both. Sixty percent of the migrant heads clearly reported financial betterment as their goal in moving: a quarter of a dinar a day (about seventy cents, the going rate for unskilled labor in Baghdad) sounds like a fortune to the peasant, who may not see any cash during an entire season. It is evident that interviews are not the best way of ascertaining causes of migration. Even if the answers are precise enough to be tabulated, they do not necessarily reflect underlying causes of which the peasant may not be aware, such as declining soil fertility, reduction in crop acreage, or population pressure. C. Horace

Hamilton has utilized a method of analysis which would yield significant answers if applied to Iraq, correlating net migration with change in crop acreage and with population pressure in North Carolina counties for the decade 1930 to 1940.[17] We would suggest as additional variables the average share of the crop received by the peasant and the average size of agricultural holding, but such analysis must await more reliable and detailed data.

The Nature of the Urban Pulls: Employment and Income

Push and pull factors can be enumerated, but their relative importance in internal migration in Iraq cannot be assessed: it is the differential between rural and urban levels of living that explains most of the migration.

Migrants from rural areas readily find positions in the unskilled labor market, although with great insecurity. Because of the shortage of technical training facilities and the handicraft background of the majority of semi-skilled and skilled laborers, some of Iraq's rapidly developing industries are dependent upon labor which not only lacks specific industrial skills but, because of its almost complete illiteracy and traditional background, has had little experience in learning anything new. One unskilled worker is an almost perfect substitute for another, with the result that they lack bargaining power and experience much frictional unemployment.[18]

The occupations of the labor force of the Asima sample at the time of the interview are summarized in Table 3. The labor force was defined as anyone working or seeking work. Unskilled work was defined as any job requiring no special training, while skilled work was a job requiring some training, very little in most cases. Typical forms of unskilled labor were found to be: in manufacturing, unspecified factory labor; in construction, hod carriers and builders of mud huts; and in service, guards, porters, servants, and unskilled office workers who are employed in large numbers, especially by the government, to run errands. Examples of skilled labor are: in manufacture, weaving, shoemaking, metal work, and (the one female) dressmaking; in transport, most were truck-drivers or taxi-drivers; in construction, bricklayers and plasterers; in service, cooks, ornamental gardeners, and religious leaders.

It is evident from Table 3 that only a small percentage of the Asima labor force has any industrial skills. The negligible number engaged in agriculture shows how completely the migrants have broken their ties with the land. Commerce appears to be almost the only occupational possibility for females--vending milk products from their cows and water buffalo, squatting beside the path with a tray of candies, cigarettes, or vegetables, or tending a stall in the local bazaar. Women and children have more leisure after the move to the city, for on the farms

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17. C. Horace Hamilton, "Population Pressure and Other Factors Affecting Net Rural-Urban Migration", in Joseph J. Spengler and Otis Dudley Duncan, eds., Demographic Analysis, Glencoe, Ill., 1956, pp. 419-424.

18. This point is elaborated in Thomas B. Stauffer's article, "The Industrial Worker", in Sydney Nettleton Fisher, ed., Social Forces in the Middle East, Ithaca, N. Y., 1955, pp. 83-98.

Table 3. Labor Force of the Asima Sample, by Occupation and Sex

Occupation	Numbers		Percent of labor force
	Male	Female	
Unskilled labor			
Agriculture and livestock	3		0.9
Manufacture	39		11.9
Public utilities, transport	3		0.9
Construction	97		29.7
Service	39		11.9
	181		55.3
Skilled labor			
Manufacture	2	1	0.9
Public utilities, transport	10		3.1
Construction	10		3.1
Service	9		2.8
	31	1	9.9
Commerce			
Vendors	36	12	14.7
In shops	14	3	5.2
	50	15	19.9
Army or police	26		8.0
Unemployed, seeking work	23		7.0
Total Labor Force	311	16	100.0

they perform much of the labor. The 327 people composing the labor force, including the 23 reported unemployed and actively seeking work at the time of the interview, rendered an average of 1.3 workers per family.

Daily wages for those who had worked during the month preceding the interview were typically 250 fils (equivalent to a quarter of a British pound), forty percent of the wage earners having received between 200 and 300 fils. An additional 25 percent had earned between 300 and 400 fils per day.

Total family income during the month preceding the interview appears in Table 4. The interviewers questioned the families carefully, checking the stated total income with the daily wages and number of days worked by each working member during the month. However, fear of taxation, reluctance to disclose financial matters to outsiders, faulty memory, and erronious conception of numbers and time undoubtedly have biased many of the answers. In three cases the interviewers were so sure that the income was being deliberately falsified that it was marked "data not available"; all three were suspected to be above average.

Sixty-five percent of the families received less than ten dinars, or 28 dollars, during the month. The arithmetic mean, computed from ungrouped data and omitting the families or persons for whom information was not available, gave 9.3 dinars per month per family and 1.8 dinars per month per person--26 and five dollars respectively. It must be noted that these incomes buy more in Iraq than they would in Europe or America, provided that they are spent on local products as they are by the poor. The middle classes feel the inflation more heavily because they

Table 4. Total Family Income of the Asima Sample during the Month Preceding the Interview

Income in dinars[a]	Number of families	Percent of families
Less than 5	64	24.7
5- 9.999	104	40.2
10-14.999	45	17.4
15-19.999	24	9.3
20-24.999	7	2.7
25-29.999	6	2.3
30 or more	6	2.3
Data not available	3	1.2
Total	259	100.0

a. One dinar equals one British pound, or $2.80.

purchase some imported goods, which usually are more expensive in Iraq than in their countries of origin. The higher incomes in the sample were in all cases caused either by the family's having more than one wage earner or by the ownership of cows or water buffalo. The elite of the Asima are the cattle owners, and, although there are many animals in the area, ownership is fairly highly concentrated. Only six of the families in the sample owned cows and eleven owned water buffalo. The milk is made into cheese, clotted cream (geymur), and yoghurt (leban), a part-time job for women which was probably not reported fully in the employment figures, and brings a good income to the owner of a herd. Until recently, the hut dwellers have been the major source of milk products in Baghdad.

The Asima sample was taken in March and early April, a rainy period during which construction workers, for example, might find employment for fewer days than their yearly average. On the other hand, the level of economic activity in Baghdad is generally higher in winter than in summer. It is impossible to estimate, on balance, the data's representativeness of yearly income nor to quantify rural-urban differences in real income. However, all that is necessary to explain the direction of the migration is to establish a significant difference between typical levels of living in the Asima and in rural villages.

Housing and Physical Possessions

The physical homogeneity of the Asima appears in the housing findings: 244, or 94 percent, of the families were living in huts built of reeds and mud, and 230, or 89 percent, of the families had one room only. On the average there were 1.1 rooms per family and 4.7 persons to a room. No hut in the sample had more than three rooms. Those which were not of reeds and mud were built of either mud or reeds alone, the latter being in most cases the temporary shelter of a new arrival. The typical hut is built over a wood frame, having walls of reed matting and a roof of the same material plastered over with mud. No household had a special room for cooking. The diet consists of round, flat loaves of bread baked in outdoor mud ovens fired by twigs or dung, cooked dishes such as stews and rice prepared outdoors on a kerosene burner, and sweetened tea. No house had any kind of plumbing, although two families were proprietors of outdoor water

taps. Only nineteen of the families (seven percent) had access to a latrine, consisting of a shallow hole surrounded by a piece of reed matting or mud wall; the object is clearly privacy rather than sanitation. There were no bathing facilities of any description in the entire settlement.

The physical possessions of the 259 families are shown in Table 5.

Table 5. Household Possessions of Asima Sample Families

Item	Families having one or more	
	Number	Percent
Bedding (mats and comforters)	251	96.9
Kerosene cooking stove (one-burner)	228	88.0
Rug (unrolled for sitting)	213	82.2
Storage chest	206	79.5
Radio (battery)	33	12.7
Table (to hold radio)	29	11.2
Bicycle	11	4.2
Chair or bench	6	2.3
Charcoal heating stove	2	0.8
Sewing machine	1	0.4

Modest as this list appears to us, the ability of almost every family to own a kerosene cooking implement (and to be able to purchase kerosene to fill it and food to cook on it) represents wealth in the eyes of rural people, who subsist almost entirely on bread and have only brush and dung for fuel. Even these semi-urban people remain too poor to own furniture, and therefore they continue to sleep, sit, and eat on the ground, unrolling a rug or mat for the purpose if they have one. It is interesting to note that the first thing bought after bedding, a stove, a rug, and a storage chest (the four essentials of housekeeping) is a radio, and then, if there is money left over, a table upon which to set it.

Recreation

Arabs are a social people and have little understanding of or opportunity for privacy. The universal form of recreation is sitting and talking--for women, in their homes or the homes of their relatives and neighbors, for older boys and men when they have cash, in coffee houses. Occasional visits to Shi'ite shrines[19] proved to be the second most common form of recreation: of the population aged thirteen and over, 64 percent of the Asima sample males and 66 percent of the females reported making these visits. Fifty-three percent of the adult males reported regular visits to the coffee houses, of which there are a number in the Asima, seventeen percent listening to the radio, ten percent going to the cinema, and another ten percent going to the mosque regularly. Only five percent of the adult females reported listening to the radio regularly, despite the presence of

19. The majority of peasants of southern and central Iraq are of the Shi'ite sect of Islam. There are four major Shi'ite shrines in Iraq, in the holy cities of Najaf, Karbala, Kazimain, and Samarra, and numerous lesser ones throughout the southern part of the country.

radios in thirteen percent of the homes; it appears that radios are mostly for men. Women are barred from coffee houses and, while there is no rule against it, do not generally go to the mosque; and it would never occur to women of this class to go to the cinema.

Use of Social Services

Of the 95 boys of primary school age, only fourteen were in government primary schools. An additional thirteen boys over the age of twelve were attending government primary schools, one was enrolled in a government secondary school, one was attending literacy classes, and three were being taught by a local religious leader (mulla) to read the Koran. There were an additional 36 males who had had some education in the past: 22 who had attended government primary schools, nine who had been taught by a mulla, three who had attended school while in the army, and two who had been to literacy classes. Thus a total of 68 males of the 633 in the sample, or eleven percent, had had some schooling, although it is doubtful that they could all be considered literate. Only three young girls were attending mulla school. No other female of the 727 was receiving or had ever received any education.

The government schools, which furnish clothing and supplementary food to needy pupils, are but one of the free social services which are being supplied by the Iraqi government as part of its development program. While the quality of many of these services leaves much to be desired, and while they remain confined for the most part to the cities, their recent growth has been commendable. In the town of Tel Muhammad just south of the Asima, a social center conducts adult literacy classes and sewing classes for girls and women and operate a maternal and child health clinic, which distributes free milk for babies. Yet no person of either sex in the Asima sample reported using these facilities. Free medical care is available at the Royal Hospital in Baghdad and, for mothers and babies, not only at Tel Muhammad but also at the nearby Sheikh Omar Maternal and Child Health Center. But the interview teams observed untreated trachoma, debilitation from intestinal parasites, occasional cases of suspected tuberculosis, and illnesses of all kinds. The failure of the migrants to utilize the available free services disproves the hypothesis that their presence in cities is an inducement to migration. A partial explanation is their very dearth in rural areas. The migrants have little knowledge of the existence of social services or of their value: illness and illiteracy are accepted as normal circumstances. Even if they do desire help of some kind, ignorance as to how to obtain it acts as a bar, as do the excessively bureaucratic procedures often involved. For example, a birth certificate, which requires that parents register their child with the census authorities, is required in government schools, and it is inconceivable that the majority would voluntarily go through such a procedure. The few pennies required for transportation, or the fact that school children are expected to wear shoes, keeps others away. There is the further element of fear. The ignorant and poor are at a decided disadvantage in a country where police have great authority, where the concept of civil rights is poorly developed, and where justice is often bought and sold. Moreover, many of the Asima people are there illegally. There is a law, seldom enforced but well known, that a runaway peasant can be forcibly returned to his landlord if he is in debt. Most of the inhabitants of the Asima feel that their best protection is anonymity, and with good reason.

This helplessness of the urban poor causes them to be exploited in many ways. The Asima land belongs to the municipality and can be leased by individuals with enough understanding of the devious ways of the government to know how to go about it. These individuals can in turn extract rent from the squatters on their leaseholds, and although the sums sound small (a dollar or two a month is typical), in comparison with what the lessee pays the municipality they amount to blackmail. The inhabitants have no effective way of determining the validity of a claim for rent, and it is to their advantage to pay it rather than moving their hut further out, necessitating the use of public transportation to and from work. The water supply is a source of profit to the proprietors of the few water taps. Perhaps fortunately for the Asima people, the stream of sewage is too badly polluted to be stomached even by those accustomed to drinking ditch water, and therefore the women purchase city water, at many times its value, carrying it home on their heads in kerosene tins.

The Level of Living

Despite this morbid picture, migrants from rural areas to the city are better off than they were before. They have material possessions unheard of in peasants' homes. Even the children occasionally have some money to spend on small luxuries, such as hard candies and luridly-colored popcorn balls. The men and older boys have access to the cinemas, cabarets, and bazaars of Baghdad which, to their eyes, must look like a Cecil B. DeMille version of "The Thousand and One Nights". Dr. K. G. Fenelon's cost of living study, made in Baghdad in 1954, definitely established the superiority of the diet of the urban poor over that of rural people. The 59 Asima families included in his sample devoted as large a percentage of their food expenditures to meat as to bread and flour,[20] while peasants almost never eat meat except at times of feasts. Furthermore, and more important with respect to their prospects for remaining in the city, the migrants believe themselves to be better off than before. Eighty percent of the families interviewed in our survey believed their total incomes, in cash and kind, to be higher in Baghdad than in their former homes. Almost ninety percent believed their present diets to be better, and 75 percent believed their present housing to be better.

When asked their major needs--a question which brought sometimes a chorus of laughter or, when the people had been asked too often and nothing done, occasional hostility--seventy percent of the families stated that they needed better housing. About fifty percent specified more readily available water. Other needs mentioned were higher wages (18 percent), permanent employment (13 percent), better clothing (11 percent), household equipment (8 percent), electricity (7 percent), toilets (6 percent), better food (5 percent), a public bath (one percent), medical facilities and a school receiving less than one percent each.

Urban Problems Resulting from the Migration

Some concrete planning as to what can be done with the urban hut dwellers, particularly of the Asima as the largest settlement, has recently begun. Attention

20. Iraq, Ministry of Economics, Principal Bureau of Statistics, Report on the Household Budget Enquiry in the City of Baghdad and its Environs, Baghdad, 1954.

of the authorities has been drawn to their plight by several circumstances. The flood of 1954, which inundated the Asima and Tel Muhammad, drove all the inhabitants and their animals over the dyke to camp in vacant lots, and their squalid existence so easily observed for several months left a lasting impression after the waters receded and they were forcibly moved back. In 1956 the Development Board decided to raise its allocation for housing, in order that its critics might see some immediate fruits of the oil revenues; the plan of 1956 called for building some thirty thousand houses between that year and 1960. Houses for those now living in huts is part of the plan, but it remains to be seen whether the more vociferous demands of white collar workers, particularly of civil servants, will not take precedence. The fear of mob violence arose again with the Suez crisis during the winter of 1956-57, at the same time that a smallpox epidemic was raging. The government decided to take some immediate steps, rather than waiting until the hut dwellers could be resettled elsewhere. At the time of our survey in early 1957 wrecking teams were cutting swaths through the Asima for streets, and there was talk of drainage, electricity, plumbing, public baths and latrines, clinics, and schools. Any solution must be temporary, for truckloads of migrants continue to arrive.

Town planning is frustrated by the migration, not only because it contributes an element of unplanned growth, but also because many authorities fear that furnishing amenities to the hut dwellers will accelerate the migration--as it may prove to do. Yet the health of the established urban people is jeopardized by the ring of villages surrounding the city. Unsanitary practices have consequences in a community of 40,000 quite different from the consequences in an isolated village of a few hundred. The inability of the medical authorities to bring the recent smallpox epidemic rapidly under control emphasized to wealthy Iraqis the necessity of supplying sanitation and medical care to the urban slums, if for selfish reasons alone.

Summary and Conclusions

The origins of rural-to-urban migration in Iraq appear in regional differences in agricultural productivity, population density, and land tenure. Data do not exist for making regional comparisons of output per unit of cultivated land, but we can conclude that output per man hour is probably higher in the north than in the southern portions of the country, with the possible exception of the central liwas in which mechanization has been extensively introduced, because of the north-south differential in density of rural population. Adverse physical factors, particularly soil salination where irrigation is practiced without drainage, further reduce southern yields. The way in which land titles have been settled on the alluvial plain and the substantial capital expenditure necessary for irrigated agriculture have given rise to a powerful landlord class, who can claim a larger share of a crop which is probably smaller per capita of rural population than in the north. It is not surprising, therefore, that the largest volume of internal migration is from the central and southern liwas to cities in which employment opportunities are expanding rapidly.

The Asima settlement near Baghdad was selected as a large and homogeneous example of this migration. There, between 34,000 and 40,000 people, the majority born outside Baghdad liwa, live in a semi-rural manner. Their simple way of life, which they have brought from their villages, has been modified

somewhat by the breaking of family and tribal ties and by their different employment and higher money incomes, but they maintain many of their folkways. Conditions of sanitation are worse than in their villages of origin, by virtue of their greater numbers and density, but established urban people living near the Asima are troubled more than are the Asima dwellers, who have had little experience with urban sanitary facilities. In most components of their real incomes, particularly diet, clothing, and household possessions, they are better off than they were before. They are aware of it: despite their many complaints, the overwhelming majority have no intention of returning to the farm. Their failure to make use of free social services is partly a result of fear and ignorance. Probably also it is a result of the established place in their standards held, for example, by meat, gold jewelry, and traditional types of household equipment--more than by literacy or good health, with which their experience is more limited. Certain changes have occurred in their consumption patterns. The radio is a recent and politically important addition to the possessions of a small but significant proportion of Asima families. The men make use of some urban amenities, as for example the cinema, but their social life centers around the local coffee houses, as in the village. The life of the Asima women has changed relatively little, with the exception of the few who have entered the labor market; however, it is very much easier than it was in their villages of origin, where they not only carried fuel and water and baked the bread but performed much of the agricultural labor as well.

Many questions remain. For example, to what extent does the migration represent increasing rural population density, rather than the rural depopulation that was suggested by a comparison of the Population Census of 1947 and the Housing Census of 1956? What is the effect on methods of production of an increasing supply of unskilled, cheap labor in the cities? What is its effect upon the established urban labor force, with its handicraft background? We can conclude, however, that, because rural-urban differentials in levels of living cause the migration, rural reform is necessary if the Iraqi government should wish to reduce its volume. Such reform, which, to be effective should include greater security of tenure, lower rents, supervised credit, and agricultural extension, appears particularly appropriate in the light of the enormous sums currently being spent to increase the area of cultivable land. Otherwise, as Mr. Yudelman warns, "Iraq might be in the position of having more high-cost land than skilled farmers who could utilize its potential."[21]

21. Yudelman, op. cit., p. 88.

THE FAVORED STATUS OF THE STATE ENTREPRENEUR IN ECONOMIC DEVELOPMENT PROGRAMS

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Summary of the Argument

In this paper a number of factors affecting economic assistance programs in underdeveloped areas are examined, and the conclusion reached that such programs contain a built-in bias which channels investment funds to government-owned enterprises at the expense of private entrepreneurs. Financiers want to see a prospectively viable enterprise with a substantial safety margin against adverse developments before they are ready to supply investment funds. But entrepreneurial programming quite generally, and especially in underdeveloped countries, is guided by numerous other considerations besides maximizing profits within limits dictated by considerations of safety. Consequently there is a large gulf between plans as drawn up by prospective entrepreneurs in underdeveloped areas and as approved by Western bankers and cost accountants. Clearly, there is a very difficult problem of communication deriving from the great differences in the cultural environments of lenders and borrowers. The process of project selection by Western financiers for obvious reasons uncovers great weaknesses in the projects submitted (i. e., in the new factor combinations), and the unfavorable diagnoses result in the elimination of many private entrepreneurs from the competitive arena. The mortality of project proposals, however, is not so great when projects are to be implemented by the State as entrepreneur. This might seem odd since the State has to draw on the same limited reservoir of imperfect entrepreneurs as the private sector, and the new factor combinations proposed are no better and, in fact, are sometimes worse. The decisions favoring the State as owner-operator--insofar as they are not based on political grounds--seem to be due to the fact that the State is able to project the picture of a viable enterprise notwithstanding the inferior factor combinations, by means of subsidized factor costs--an avenue not generally open to the private entrepreneur. As a result we get "viable" enterprises, bad allocations of resources, and very questionable additions to the total output of the country concerned. A plea is made for comparing state and private enterprises on the basis of realistic factor costs.

Introduction

Economic aid programs operated for the benefit of underdeveloped countries appear to operate in such a manner that they assist State enterprise far more than they assist private enterprise. This is so, notwithstanding that (a) in the economic fabric of underdeveloped countries private enterprise plays a much larger role than in the Free World aid programs provided for their development, and that (b) the large share accorded to the State as entrepreneur in underdeveloped countries is certainly not due to any preference for state-controlled

enterprise--at least as far as American aid programs are concerned. The preponderant share of publicly-owned enterprises in United States aid programs reflects, in the first instance, political considerations: to these considerations our basic objective, strengthening the Free World, gives an unquestioned green light. But beyond that, that is to say, where there is no compelling political reason favoring public ownership, economic criteria ought to assume a decisive role. At this point, however, we are confronted with an economic rationale (valid or invalid) advanced in favor of state enterprise, which is said to be independent of political considerations. Such an economic rationale makes of the combination of political and economic considerations a "tails you win, heads I lose" proposition from the standpoint of private enterprise. This is so because, if political considerations pointing towards public ownership are invariably strengthened by economic considerations said to point in the same direction, and political considerations which are indifferent to the form of ownership or which point towards private enterprise are offset by economic considerations again and always pointing towards public ownership, the cause of private enterprise in underdeveloped areas may be considered lost.

It is concern over the existence of such a centralized-planning bias that has prompted this paper. The form of ownership constitutes an important long-run problem because of its obvious implications for the kind of societies that are being built up in underdeveloped areas.

Discussion

I

Shortages of capital, entrepreneurship, managerial and technical skills constitute the most frequently mentioned obstacles in the way of economic expansion in underdeveloped areas. Of these, a lack of entrepreneurship would seem to be an almost absolute barrier to economic expansion under domestic control because neither a determined national effort within a low-income country to bring sacrifices in the interest of development, nor a willingness on the part of more developed countries to help by giving or lending resources and teaching skills can provide indigenous entrepreneurial talent. Entrepreneurship--to focus our attention on the non-importable ingredient--must be defined narrowly as the actual setting up of new production processes (the carrying out of new factor combinations), and not as the running of an established business (requiring managerial skill which can be inculcated by teaching). Schumpeter, in contrasting the two, states: "Carrying out a new plan and acting according to a customary one are things as different as making a road and walking on it."[1]

The need for the entrepreneurial ingredient in underdeveloped as well as developed areas has often been cited. Thus, for instance, Professor Nurkse in his Problems of Capital Formation in Underdeveloped Countries, turns to Schumpeter's Theory of Economic Development to provide a basis for his explanation of the forces that bring about balanced growth in underdeveloped countries. Although Nurkse regards ownership merely as the administrative form of development, he

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1. Joseph A. Schumpeter, The Theory of Economic Development, Cambridge, Mass., 1950, p. 85.

accepts the central role Schumpeter accords to the entrepreneur in economic development whether direction or control is public or private. He refers to the Schumpeterian "mould which we must use, although we may use it with slightly different ingredients."[2] The "slightly different ingredients", as Nurkse explains, are made necessary because Schumpeter refers to the evolution of "Western Capitalism" and not to economic expansion in underdeveloped areas. While clearly there is a gap to be bridged between the two kinds of entrepreneurs and their settings, the central position of the entrepreneur in the productive process is not challenged.

The remedy usually suggested for deficient entrepreneurship is the organization of proposed productive activities under governmental rather than under private auspices. This might imply that the marshalling and combination of productive resources under state control can be accomplished without entrepreneurship, an obvious impossibility, or at least that a meager supply of the entrepreneurial ingredient will accomplish more on government payroll than if permitted to take command of a private venture. This latter contention might be valid, and the argument in this paper will not assume that it is not. However, we know of no convincing evidence of any need to economize on entrepreneurship by giving preference to state-controlled enterprise. Later in the paper it will be argued that the reservoir of entrepreneurs in underdeveloped countries is far from being fully tapped. At this point we shall only note that the fact that development is occurring in a given country under indigenous auspices, whether public or private, is proof of the existence of indigenous entrepreneurship.

But after diagnosing the presence of entrepreneurial talent in underdeveloped countries, we must examine whether its characteristics and especially its shortcomings are such as to tip the scales against private undertakings and in favor of public enterprise.

As may be expected, we find many striking similarities between entrepreneurs in developed countries and their counterparts in underdeveloped countries. However, it is surprising that the very characteristics which seem to be accepted as basic shapers of the entrepreneur in developed countries, seem to be held against entrepreneurs in underdeveloped countries as fanciful irrationalities. Since it seems to be partly as a result of such traits of ability and character that private entrepreneurs in underdeveloped countries are deprived from access to the modest supplies of investment funds which (whether they are of domestic or foreign origin) are handed out selectively by public authorities, the comparison of these characteristics may be of practical significance.

What are the basic characteristics of the Western entrepreneur? The classic portrait was, of course, drawn by Schumpeter; but before quoting him an appeal to common observation may be in order. When we think of the actual founder of a small, medium, or large business, that is, the man who implements certain new factor combinations, we do not have people in mind who make a contribution to the economics of the firm or who are skilled cost accountants. Even the most unromantic accounts of organizers of new businesses show them as less than fully appreciative of economic reasoning or accounting measurements. The

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2. Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, Oxford, 1953, p. 12.

successful running of an established enterprise is, of course, a very different matter, since there the merits of alternative courses of action can be considered and measured with varying but generally large degrees of precision. But in this paper, we are concerned not with the established managements of existing enterprises, but with development, with new productive units, which require entrepreneurship. Now, following Nurkse, we turn to Schumpeter to note certain entrepreneurial characteristics:

> ...the success of everything depends upon intuition, the capacity of seeing things in a way which afterwards proves to be true, even though it cannot be established at the moment, and of grasping the essential fact, discarding the unessential, even though one can give no account of the principles by which this is done. [3]

The behavior of the typical entrepreneur, in Schumpeter's view,

> ...does not seem to verify the picture of the economic man, balancing probable results against disutility of effort and reaching in due course a point of equilibrium beyond which he is not willing to go...Hedonistically, therefore, the conduct which we usually observe in individuals of our type would be irrational. [4]

Schumpeter makes clear in precise language that the entrepreneurial function is not of an everyday repetitive nature, and also that the typical entrepreneurial behavior is not closely calculable:

> Where the boundaries of routine stop, many people can go no further, and the rest can only do so in a highly variable manner. The assumption that conduct is prompt and rational is in all cases a fiction. [5]

Perhaps most significantly we find that his dominant motives have little direct relationship with the Profit and Loss Statement. His ambition seems to be directed towards certain intangibles: the founding of a "private kingdom", the "joy of creating", of "exercising one's energy and ingenuity". [6]

> ...the impulse to fight, to prove oneself superior to others, to succeed for the sake, not of the fruits of success, but of success itself...The financial result is a secondary consideration, or, at all events, mainly valued as an index of success and as a symptom of victory... [7]

It appears reasonable to conclude from the foregoing quotations that the entrepreneur's "eye of faith" which, as Nurkse states, is needed "in the early dawn of

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3. Schumpeter, op. cit., p. 85.
4. Ibid., p. 92.
5. Ibid., p. 80.
6. Ibid., p. 93.
7. Ibid., p. 93.

industrial development" functions very differently from the eye of the cost accountant, especially when the latter conducts acid tests to determine the reasonableness of a proposed undertaking. It is, of course, a historic fact that in the process of economic evolution, or more specifically, under growing competitive pressures which accompany the evolutionary process, the entrepreneur and the cost accountant became closely associated; but it always tended to be the kind of relationship an artist has with his manager, and the degree of the association, i.e., the extent to which new factor combinations are guided by accounting advice, was dependent and continues today to depend on the intensity of competition and not on the acceptance of the cost accountant as a full-fledged partner in decision-making. This can be observed by comparing investment decisions in several highly industrialized countries with different competitive conditions, that is, where the vulnerabilities of large industrial establishments differ considerably in degree; or by traveling backward in time.

Thus, for instance, in the United States we are likely to find that in the retooling program of a large manufacturer, each feature of a given machine tool must have a functional justification in terms of a carefully worked out production and sales program. If a certain machine tool can perform, say, 25 different operations, of which only 15 are needed for implementing firmly planned production programs, there is little doubt but that a simpler and less expensive model will be bought. However, where competitive conditions are not quite so keen, the model with more diversified uses might find acceptance. To be sure, the more complex model--incorporating (in our example) the ten extra features not needed in carrying out already firm production plans--will not be bought without a certain amount of rationalizing about the future needs for those extra operations and the "real" saving accomplished by this "farsighted" decision. What is important for our purpose is that this kind of rationalization is not by reference to fully approved production plans, but rather to an image which is not very clearly focused and the component parts of which elude precise measurement.

Let us now turn to low-income countries.

The intuitive (and thus partly extra-rational) nature of entrepreneurial action is, of course, the same in underdeveloped countries as in the Schumpeterian world, but the area of accurate or logical business reasoning is further restricted by great limitations on the entrepreneur's horizon deriving from a dearth of business knowledge and generally from the unsophisticated setting in which the entrepreneur lives. As a result, he can usefully absorb even less guidance on how to set up and how to run his establishment than his counterpart in a developed country. Clearly, then, a favorable Profit and Loss Statement, projected to, say, two years after the investment is made, is not the central attraction in his entrepreneurial vision, and therefore his responsiveness to business reasoning is bound to be limited. The gulf between his investment decisions and "pure" business reason widens still further if his circumscribed business capacity is taken in conjunction with the motivation peculiar to the business environment in underdeveloped countries.

To begin with our man is likely to be in possession of income that is more than adequate for satisfying his consumptive desires long before he thinks of establishing himself in industry. If his income is principally or largely derived from commercial pursuits or money lending, he may want to improve his reputation. For he generally transacts business under highly restrictive and poorly

enforced fiscal and foreign exchange regulations which he cannot afford to take more seriously than his competitors. Further, the desire to found a Schumpeterian private kingdom may run a close second to the urge to improve his respectability.

The entrepreneur's dreams or plans come into more direct conflict with accounting tests at another point. We are here concerned with an influence working on our entrepreneur which might perhaps best be described as an extension of Duesenberry's demonstration effect (which he uses in describing consumer behavior)[8] to investment practices in underdeveloped areas. Just as among consumers everywhere, there is among industrialists in underdeveloped areas (in their capacity as producers) a very potent desire to "keep up with the Joneses". It takes the form of an urge to copy more or less every copyable feature of some existing industrial plant in a highly developed country. The argument that because of much lower wage rates prevailing in his country much simpler equipment is called for might shatter dreams but will not appreciably alter plans, just as governments of some underdeveloped countries cannot be dissuaded from constructing steel mills, although economic justifications are clearly inadequate.

In the light of the important role played by such "unbusinesslike" motives, it is easy to understand the negative attitude of the financier or cost accountant. The completely foreign cultural background of these experts naturally is an important shaper of their attitudes and the adverse decision may be less categoric when the financier belongs to the same community as the entrepreneur, for the cost accountant's negative attitude may in such situations be offset to some extent by the financier's faith in the entrepreneur's judgment. But when the Western banker and Western cost accountant as a team confront the indigenous entrepreneur, the outcome may be quite unfavorable. The Schumpeterian dream or vision projected by the entrepreneur does not pass the basic accounting tests, is classed as a project which among other ills suffers from overcapitalization, and is rejected. Further, the act of rejection is not educational in any meaningful sense, since no enlightenment has been afforded either the rejected application or other would-be entrepreneurs. Those who have been concerned with overseas investment programs will have observed that Western aid officials passing on projects frequently fail to "establish contact" with overseas entrepreneurs, and are in fact often regarded as tiresome pedants by the businessmen they are trying to finance.

But not withstanding the need for basic accounting justification, we cannot escape the fact that if there is to be development under indigenous auspices, we have to deal with the problem of entrepreneurial inefficiency (this is to say, that his main tool--business judgment--does not cut as precisely as that of his colleagues in more advanced countries) in combination with the fact that entrepreneurship is a non-importable ingredient. Who would think of excluding a good, hardworking, talented physician from practice in some remote area just because his methods are 50 years old, if there is no one to replace him?

II

As a result of imperfections in establishing contact, the only way open to the approval of projects under indigenous auspices is the relaxation of

8. James S. Duesenberry, Income, Saving and the Theory of Consumer Behavior, Cambridge, Mass., 1949, p. 28.

standards by Western financiers (since entrepreneurs in underdeveloped countries are unable to exceed their limitations). As a practical matter, this relaxation is not geared to take systematic account of lower standards of precision of entrepreneurship in underdeveloped countries. Rather, there is a readiness to accept lower economic standards (less than "optimal" factor combinations) corresponding to the lower entrepreneurial acumen so long as this is not reflected in poorer business prospects for the individual firm, but not to accept the same factor combinations when accounting data indicate the prospect of poor business results. For reasons to be discussed below, the fact is that government enterprises are in a better position to combine poor factor combinations with favorable Profit and Loss Statements than private enterprises. It is not suggested that the inability of private enterprise to do this leads to anywhere near a hundred percent mortality rate among private projects. Rather, we should note that an effort is made to have a small private section in United States investment programs in each assisted country because of our real and sincere desire to promote private enterprise as much as possible. If we are not too ambitious, this is quite easy to a certain extent: for a few propositions, usually on a modest scale, can be found where factor combinations are acceptable, at least if sympathetically reviewed. But while factor combinations offered by a private entrepreneur benefit only from sympathetic review, factor combinations proposed by a governmental entrepreneur are to a substantial extent relieved from the censorship of the market place. More precisely, however, how do government enterprises achieve such a favored status?

First, we should note that the finding that "a suitable" private entrepreneur is not available does not merely mean that no entrepreneurial talent is to be found outside of government circles. It also means that no private individual comes to the fore who could, in addition to providing the talent needed for carrying out new factor combinations, also devise and set up a prospectively viable enterprise. However, a government may be able to show good financial prospects and gain the cost accountant's approval. The factor combinations, we emphasize, are probably not any better and in some cases may be worse, especially when political and other prestige considerations may weigh more heavily in favor of "modern" plants. But the governmental entrepreneur, even without superior factor combinations, is in a position to project expectations of business success where the private entrepreneur is unable to do so because the government is in a position to transfer certain costs out of the firm and on to the general economy--shove them under the rug, as it were--a device generally denied to the private businessman. Once these costs are spread around in the economy, they are out of the area of competence of the cost accountant, and come under the jurisdiction of the economist; and the quantitative conclusions of the economist are accorded considerably less weight than those of the cost accountant.

Thus, we have a paradoxical situation: our healthy private enterprise mentality induces us to conduct certain accounting tests pertaining to the firm, and not extending beyond it, at least not in a similarly precise manner. As a result we show preference for the state entrepreneur simply because he is in a better position to satisfy these formal requirements, though his additions to the economy are no more and may well be less than those of private enterprise.

The means by which government enterprise can show better financial prospects than private enterprise under identical factor combinations consist essentially in valuing factor costs below their current market price, in other words, by subsidizing them (though usually not through the budget).

Interest costs constitute the most obvious example. Although both public and private investors pay the same low rate on development loans (say, about 6% as contrasted with an actual market rate of 25 to 40%), the public investor has a marked advantage when it comes to ancillary investment costs: he obtains any additional funds he may need (whether for working capital or for expansion) at low rates, while the private entrepreneur must pay the market rate.

The point, to be sure, is not that the private entrepreneur borrows at a higher cost, but that the state entrepreneur borrows at a total cost way below the going rate (i.e., if all his debts are considered). The lower-than-market cost paid for capital makes possible the wasteful use of this productive factor without incurring the direct penalties of the market. In other words, there is a misdirection of investment resources, notwithstanding that they are very scarce in underdeveloped countries. Since the influence of market forces is probably greater in the case of private enterprise, it follows that in government enterprises the misdirection of investment is likely to occur on a larger scale.

To illustrate the consequences of artifically low interest rates, let us assume that the going rate of interest is 30% per annum, and that development funds are made available at 6%. As a first approximation, the borrower enjoys a 24% annual windfall. In practice it is more likely that this 24% is divided among (a) over-capitalization to accommodate noneconomic criteria; (b) windfall; and possibly (c) hidden costs of the loan. The possibility of (c) exists only in the case of the private entrepreneur. For this reason, and also because the private entrepreneur probably pays interest at a higher rate (i.e., a higher composite rate counting all of his debts), his elbow room for over-capitalization is smaller and a more economic enterprise is likely to result.

Factors other than the interest rate placing private enterprise at a disadvantage vary from country to country and depend on what sources of subsidies government finds conveniently accessible.

Take for instance this example: in Taiwan there is a NT $14000 (about US $400.00) interest-free "deposit" required for the installation of a telephone. The going rate of interest being about 24% per annum, this amounts to a surcharge of some US $14.00 a month (the wage of one skilled or semi-skilled worker). Since charges for the actual telephone service rendered are almost nominal, this flat charge discriminates against small enterprises, and since it has been introduced only recently, also against new enterprises. (The large government enterprises are already established, and there is no deposit requirement for telephone extensions.)

Another advantage enjoyed by government enterprise has to do with access to imports; state enterprises have greater assurance of future foreign exchange allocations than private enterprises, and therefore black or gray market exchange rates and possible costly work interruptions due to unavailability of imported raw materials or equipment do not have to figure in their calculations.

The ready availability of space or low rents are other factors insulating government enterprises from the realities of economic life and making business success possible without commensurate additions to total output.

We submit that before a public enterprise is judged superior, the success of its operation should be compared to that of a private enterprise on the basis

of true factor costs prevailing in the local (regional, or national) market. Project eligibility based on such criteria would assure a larger net contribution to the economy, would help to build a viable enterprise, and would give a chance to the private entrepreneur.

For the future financial success of the firm, projected as the difference between anticipated revenue and anticipated costs, can be as favorable in the case of the private as in the case of the public entrepreneur, if we do not force acceptance of our imported Western notions of what individual cost items (especially the rate of interest) ought to be like, and if we refrain from encouraging, or even condoning lower factor costs for government enterprises than prevail in the market. Rather, we should encourage competition among enterprises operating under private and public ownership with equal access to productive resources.

In the foregoing, for analytical reasons, a sharp distinction has been made between the role of the "economist" and that of the "cost accountant" in judging investment projects. The conclusion reached is that the quasi-mechanical application of the tools with which each is equipped leads to virtually automatic decisions concerning eligibility of such projects for investment funds. In theory, the decisions would be the same whether the cost accountant was an ardent advocate of private enterprise or a strong proponent of public ownership. The same--in theory, we repeat--ought to hold true also for the economist. In practice, of course, the subtle judgments involved are to some extent subjective and are inevitably influenced by the social and political outlook of the individuals concerned. Nevertheless, we are convinced that the bias in favor of public enterprise deriving from the quasi-automatic application of accounting standards is real and serves to increase the ratio of public to private enterprises in underdeveloped areas--with all that this implies for the future shape of societies in those countries.

OCCUPATIONAL SATISFACTION AND ASPIRATION IN AN UNDERDEVELOPED COUNTRY: THE PHILIPPINES

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The socio-economic development of so-called underdeveloped areas and the manifold problems attending the introduction of the industrial order and technology of Western civilization in Africa, Asia, and Latin America have become in recent years a major focus of interest for social scientists.[1] Although much research has been done on other sectors of the social structure and how these may impede industrialization,[2] relatively little attention has been paid to the existent occupational structure in these regions, especially in such matters as the prestige stratification of occupations, the relationship between occupational and social stratification, occupational inheritance and mobility, the nature and extent of work satisfaction among various strata of the labor force, etc.

The present paper is an attempt to bring to light some of the subjective facets of the occupational structure in an underdeveloped country, the Philippines.[3] More specifically, it will report the findings of an empirical research dealing with two main problems: (1) components of work satisfaction and dissatisfaction among members of the labor force, and (2) patterns of occupational aspiration--what jobs are desired by whom and for what reasons.

The field research was carried out during 1954-55 on the island of Luzon, the largest and most populated of the islands comprising the Philippines. Schedules were administered to past or presently gainfully employed workers in five

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1. Surveys of the literature and extensive bibliographies on underdeveloped areas may be found in Wilbert E. Moore, Industrialization and Labor, Ithaca, N. Y., 1951; "Social Implications of Technical Advance", Current Sociology, Vol. I, 1953, pp. 244-265; "Social Implications of Technical Advance in Underdeveloped Countries", Current Sociology, Vol. III, 1954-55, pp. 5-73.

2. See, for example, Moore, op. cit., pp. 299 ff. and passim; Marion J. Levy, Jr., Some Problems of Modernization in China, New York, 1949; Marion J. Levy, Jr., "Contrasting Factors in the Modernization of China and Japan", Economic Development and Cultural Change, Vol. II, October 1953, pp. 161-197; Bert F. Hoselitz, "The Recruitment of White-Collar Workers in Underdeveloped Countries", in Lyle W. Shannon, ed., Underdeveloped Areas, New York, 1957, pp. 181-189.

3. The Philippines may be considered an underdeveloped area due to the following characteristics: (1) a high percentage of the labor force engaged in primary industries--including nearly 80% in agriculture alone; (2) a low per capita income; (3) a low level of industrialization; and (4) a rapidly expanding population, presently doubling itself every generation.

different areas. One was an urban community of about 30,000-35,000 inhabitants, located in the suburbs of the capital city of Manila; the other places were all rural communities, located at distances varying from 13 to almost 100 miles away from Manila. In all, 641 questionnaires were completed, 82 percent of these in the urban municipality. The main reasons for getting fewer rural respondents were that (1) the rural sites showed a relatively high degree of socio-cultural homogeneity; and (2) it was more difficult to secure competent interviewers in rural areas than in the urban community (where it was possible to use trained college students from the nearby University of the Philippines).

Table 1 shows the occupational distribution of the rural and urban sample.

Table 1. Occupational Distribution of Urban and Rural Respondents

Occupational Category	Urban (N = 527)	Rural (N = 114)
Professionals and semi-professionals	22%	3.5%
Managers and executives	7	-
Farm owners and managers	1	14
Small business owners, self-employed	10	3
Clerical and sales workers	18	3
Skilled workers and foremen	12	10.5
Semi-skilled and kindred workers	17	17
Unskilled workers and laborers	4	14
Domestic servants	1	-
Public service workers (fire, police, etc.)	8	-
Farm tenants	-	33
Not classifiable	-	3

Undoubtedly, the figures for professionals and semi-professionals, and also for managers and executives are not representative of the total Filipino urban occupational structure. This is probably because the urban community (San Juan del Monte) is somewhat atypical of urban centers in having a large, populous upper-middle class residential area, with many professionals such as physicians, lawyers, and teachers working in nearby Manila. Quite likely, also, is that domestic servants may be underrepresented in the urban sample: interviews were conducted mainly with household heads, so that a domestic servant living with his or her employer (as is often the case) would not have an equal change of being interviewed. As to the representatives of the rural sample, the occupational distribution of our sample shows general agreement with the findings of Rivera and McMillan in their survey of rural areas.[4] The only marked discrepancy is that our rural sample shows a much greater proportion of skilled workers than theirs. This may be accounted for by the fact that one of our rural areas had a great many persons who, after the collection of the rice harvest, were employed full-time as shoemakers.

Occupational Satisfaction

How do sons compare their socio-economic status with their fathers'? The survey asked urban respondents this question: "On the whole, do you consider

4. Generoso F. Rivera and Robert T. McMillan, The Rural Philippines, Manila, 1952, p. 211.

yourself better off, the same as, or worse off socially and economically than your father when he was the same age as you are now?" For the purpose of this survey the sample was analyzed in terms of white-collar and blue-collar workers;[5] the results presented in Table 2 indicate that white-collar workers see themselves better off than their fathers to a degree which is significantly higher than is the case for blue-collar workers.

Table 2. Urban Respondents' Comparison of Their Socio-Economic Position to That of Their Fathers

Respondents	Better	Same	Worse	D.K.	N
White-collar workers	165 (55%)	59 (19.5%)	56 (18.5%)	22 (7%)	302
Blue-collar workers	93 (39%)	60 (25%)	68 (28%)	19 (8%)	240

X^2 with 3 d.f. is significant beyond the .01 level.

The respondents were then asked, "On the whole, would you say that you feel very satisfied, satisfied, indifferent, dissatisfied, or very dissatisfied with your present occupation?" The percentage distribution of answers is given in Table 3.

Table 3. Extent of Satisfaction with Present Occupation (N = 633)

Level of satisfaction	White-collar respondents	Blue-collar respondents	all
Very satisfied	28%	10%	19%
Satisfied	60	63	61
Indifferent	1	-	1
Dissatisfied	6	18	12
Very dissatisfied	1	2	2
Don't know	1	1	1
No answer, not classifiable	3	6	4

These figures show that a very substantial majority of all the respondents feel either satisfied or very satisfied with their present occupation.[6] However, it must be noted that nearly three times as many white-collar workers are very satisfied as blue-collar workers, and three times as many blue-collar workers indicate being either dissatisfied or very dissatisfied.

5. Unless otherwise noted, throughout this paper white-collar workers include professionals and semi-professionals, managerial and executive, small business and self-employed, clerical and sales; blue-collar workers comprise skilled, semi-skilled, and unskilled workers, as well as those employed in public service (fire, police, etc.).

6. It should be borne in mind that a possible reason for this is that unemployment and underemployment are grim realities in Central Luzon, so that someone who has a job may well fell more satisfied with it than if he were living in an economy of full employment.

Specific occupational groups showed wide differences in levels of job satisfaction. Of those very satisfied, managers and executives had the highest percentage (46 percent of this category), followed by public service workers (32 percent) and professionals (28 percent); on the other hand, only one percent of unskilled workers indicated this level of job satisfaction. Among those who said they were dissatisfied with their present occupation, farm tenants (28 percent) and unskilled workers (26 percent) were highest, while managers and executives (4.5 percent) and farm owners and managers (5 percent) were lowest. Of those who stated they were very dissatisfied, unskilled workers showed the highest incidence, 7 percent. It seems interesting to point out that the general pattern of job satisfaction following hierarchical levels is similar to that in the United States, where managers and professionals have the highest level of job satisfaction and the least skilled workers have the lowest level. [7]

To find some of the components of work satisfaction, the survey asked of Filipino respondents what they liked best about their present occupation. The spontaneous responses were grouped into several categories, and the results are presented in Table 4.

Table 4. Factor Liked Best about Present Occupation

Factor	White-collar respondents	Blue-collar respondents	all
Intrinsic work satisfaction	16%	17%	17%
Working conditions	15	9	12
Economic	10	12	15
Work associates	7	6	6
Nearness to home	5	6	6
Prestige of the occupation	4	*	3
Opportunities for advancement or for education	4	3	3
Employer or supervisors	*	2	1
Other reasons	7	3	5
Don't know	4	5	4
No spontaneous responses	28	37	32

* Less than one percent.

As may be seen from Table 4, nearly one-third of all respondents failed to give a spontaneous response. On the whole, there appears to be no major difference in the frequencies in which factors were mentioned by white-collar and blue-collar workers, except that prestige of the occupation and working conditions were mentioned more often by white-collar workers. For each of these two groups of workers, the category of responses most often cited was that of intrinsic work satisfaction.

7. C. Wright Mills, White Collar, New York, 1951, p. 229. Mills mentions that 86 percent of the professionals and 74 percent of the managerial workers stated general satisfaction with their jobs, against 56 percent of skilled and 48 percent of semi-skilled workers.

What do respondents dislike most about their jobs? This is summarized in Table 5, which shows the percentage figures for white-collar and blue-collar workers, as well as for the combined sample.

Table 5.5. Factor Disliked Most about Present Occupation

Factor	White-collar respondents	Blue-collar respondents	all
Economic (wages, salary, security)	7%	10%	9%
Working conditions	9	7	8
Distance from home	6	4	5
Employer and supervisors	2	7	4
Work associates	2	3	3
Lack of opportunities for advancement or education	1	5	3
Boredom, monotony of work	2	2	2
Low prestige of occupation	1	1	1
Other reasons	13	8	10
Don't know	8	5	6
No spontaneous responses	49	48	49

Since the majority of all respondents had indicated satisfaction with their occupation, it is not too surprising to find a large percentage of non-responses. In the combined sample an economic factor was the most frequent source of work dissatisfaction, closely followed by working conditions.

Occupational Aspirations

To see what are some of the dimensions of occupational aspiration or ambition, rural and urban respondents were asked: "If you had to choose between manual labor and mental work, which would you choose?" The findings showed that blue-collar workers seem evenly divided between choosing either category, but, on the other hand, white-collar workers prefer mental work to manual labor by a better than 3:1 ratio. For a finer distinction of occupational preference, respondents were asked to indicate in what occupation they would like to be. The results are presented in Table 6.

Among urban respondents, if we omit those whose answers lay in the categories "farming",[8] "don't know", or "not classifiable", a comparison of occupational preference in terms of white-collar and blue-collar occupations revealed the figures given in Table 7.

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8. It is difficult to classify farming as an occupational choice into the white-collar/blue-collar dichotomy: a person may wish to be in farming as a farm owner or manager who employs tenants and as such could be considered as a white-collar individual; another person may mean by farming a desire to till the soil himself, and hence might be regarded as a blue-collar worker. Five percent of the urban respondents indicated farming as their occupational preference.

Table 6. Occupation Preferred, White-Collar and Blue-Collar Workers

Occupation Preferred	White-collar respondents (N = 327)	Blue-collar respondents (N = 308)
Same occupation as presently held	25%	16%
Professional and semi-professional	26	8
Managerial and executive	10	3
Farming	4	6
Small business, self-employed	14	10
Clerical and sales	7	12
Skilled work	2	12
Semi-skilled and kindred work	1	8
Unskilled work	1	2
Public service work (police, fire, etc.)	-	1
Don't know	5	12
No answer or not classifiable	5	7

Table 7. Type of Work Preferred, Urban Respondents

Respondents	White-collar occupations	Blue-collar occupations	N
White-collar workers	269 (96%)	12 (4%)	281
Blue-collar workers	101 (44%)	130 (56%)	231

In all, 26 percent of the sample indicated they would prefer to stay in their present occupation (29 percent of white-collar workers, 22 percent of blue-collar workers); holding aside this category, it can be seen from Table 7 that white-collar occupations are overwhelmingly favored by persons who are presently in these occupations, whereas blue-collar workers are nearly divided in their preferen

Another aspect of occupational choice treated in the survey is the kind of occupation parents desire for their children. Respondents were asked, "What occupation would you advise your children to enter, assuming they had the chance to do so?" The answers of white-collar and blue-collar respondents are given in Table 8.

As may be seen in Table 8, the emphasis on the professions is the most salient aspect of occupational preference for children: more than one-third of all respondents indicated occupations in this group as the ones they would advise their children to enter. This reflects the high prestige of the professions in the occupational structure of the Philippines,[9] but this striking preference for the professions has also been reported in the United States.[10]

9, 10. At bottom of next page.

Table 8. Occupation Advised for Children

Occupation Advised	White-collar respondents	Blue-collar respondents	all
Professional, semi-professional	41%	30%	36%
Managerial and executive	1	*	1
Farming	4	6	4
Small business, self-employed	11	7	9
Clerical and sales	2	8	5
Skilled and kindred work	2	10	6
Semi-skilled and kindred work	1	6	3
Public service work	*	*	*
Children's own choice	29	20	24
Don't know	4	8	6
Not applicable, not classifiable	5	5	5

* Less than one percent.

It is interesting to note that managerial and executive occupations were the choices of very few individuals, and that nine times as many individuals would advise their children to have a small business.[11] It may also be seen that less than 10 percent of all respondents would advise their children to take skilled or semi-skilled occupations, and that only four percent mentioned farming as their occupational preference for their children--although the Philippines is primarily an agricultural country.

We have previously discussed what factors do workers like best about their present occupation; against this it is interesting to see the reasons they give for the occupation in which they would like to be. Again the sample was divided into the dichotomy of white-collar and blue-collar workers, with the results presented in Table 9.

A major difference between what workers like best about their present occupation and what they like best about the occupation they would like to enter is the importance of the economic factor: whereas wages or economic security was mentioned by only 11 percent of the total sample as far as what is like best about the present occupation, 26 percent mentioned this as the main reason for the desired occupation. The emphasis upon the financial aspect is even more marked

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9. Edward A. Tiryakian, "The Evaluation of Occupations in an Underdeveloped Country: The Philippines", American Journal of Sociology, Vol. 63, January 1958, pp. 390-399.

10. Cecil C. North and Paul K. Hatt, "Jobs and Occupations: A Popular Evaluation", in Logan Wilson and William Kolb, eds., Sociological Analysis, New York, 1949, p. 471.

11. A possible interpretation of this is that in the Philippines--and perhaps in other underdeveloped countries as well--there are relatively very few indigenous executives and managers, and that moreover these occupations are not very "visible".

Table 9. Reasons for Respondents' Desired Occupation

	White-collar respondents	Blue-collar respondents
Economic (wages, salary, security)	25%	28%
Intrinsic work satisfaction	14	11
Working conditions	10	13
Service to the country or to the community	4	3
Opportunities for advancement or for education	3	3
Prestige of the occupation	2	2
Other reasons	37	29
Don't know	1	1
No response or not applicable	4	10

Table 10. Reasons for Occupation Desired for Children*

	White-collar respondents (N = 237)	Blue-collar respondents (N = 308)
Economic	27%	40%
Service to the country or to the community	18	13
Prestige of the occupation	7	5
Opportunities for advancement or for education	7	4
Working conditions	4	7
Intrinsic work satisfaction	1	+
Nearness to home	0	2
Work associates	0	+
Other reasons	34	29
Don't know	2	0

* Respondents who said they would let their children have their own occupational choice are not included; they amounted to about 25 percent of the sample.

\+ Less than .5 percent.

if we consider the reasons given for the occupation that respondents would advise their children to enter, given in Table 10 above.

As is shown in Table 10, respondents place more stress upon the economic aspect of the occupation desired for their children than any other reason. Of course, in evaluating the importance of this factor, one is not certain whether there is a projective mechanism at work (i.e., whether the respondents citing this aspect are unwilling to admit it as the basis of the satisfaction with their own actual occupation, but project this motivation onto the occupation desired for their children), or whether the respondents are thinking in terms of the best interest of their children, or both.

It is also worth noting that service to the country (or to the community) is the second most frequently mentioned reason for the children's occupation.[12]

12. This is perhaps a reflection of the finding that Filipinos see the individual as closely identified with the group. See Bartlett (continued on next page)

This factor had been mentioned by only a few respondents in stating the reason for the occupation they themselves would like to be in and hardly by anyone as the main source of satisfaction for the occupation presently held.

A further comparison was made between the reasons given for one's desired occupation and for one's children. Of the 168 persons who had mentioned an economic factor (wages, economic security, etc.) as the reason for their desired occupation, 39 percent mentioned this as the reason for the occupation they would advise their children to enter: this was by far the most frequently mentioned factor for this particular group of respondents.

Those who liked best about their desired occupation the working conditions also mentioned an economic reason more than any other criterion as the basis of the occupation they would advise for their children. Even respondents who had indicated either intrinsic work satisfaction or opportunities for advancement for their own desired occupation still mentioned an economic factor for their children's occupation more than any other reason.

As a group, it was mainly those respondents who found as the prime source of work satisfaction non-material factors who were likely to stress the same sort of factors in indicating the reason for the occupation they would advise their children to enter. Thus, those who had mentioned prestige or service to the country as the basis of their desired occupation also placed more stress on these same criteria, respectively, in giving the reason for the occupation they wish for their children.

It may be of some interest to make a comparison between factors which made an occupation desirable in the Philippines with those which are cited by American respondents. A study conducted in the United States in 1947 by the National Opinion Research Center asked a cross-section of the population two questions which are relevant for this comparison: (1) "When you say that certain jobs have 'excellent' standing, what do you think is the One Main thing about such jobs that gives this standing?"; (2) "What do you think is the most important Single thing for a young man to consider when he is choosing his life's work?" Although these questions are not the same as those asked to the Filipino sample, they are similar enough to make a crude comparison. Table 11 shows the rank order of factors cited by American respondents to the above questions and the rank order of factors given by Filipino respondents in answer to the questions of what they liked best about the occupation they would like to be in and the occupation they would like their children to enter.

In spite of some rank order differences, one can see from the comparative data that the desirable features of occupations in the Philippines show a notable overlap with those in the United States. Economic considerations rank at or near the top in both countries and are considered more important than such things as opportunities for advancement or working conditions. However, in both nations, non-material attributes of an occupation are also highly evaluated, including such factors as service to the country or to humanity, and intrinsic work satisfaction.

H. Stoodley, "Normative Attitudes of Filipino Youth", Americal Sociological Review, Vol. 22, October 1957, p. 561.

Table 11. Desirable Features of Occupations, in the Philippines and the United States*

Philippines	United States
I. Reasons for desired occupation of respondents:	I. Reasons for high standing of occupation:
1. economic factors	1. job pays well
2. intrinsic work satisfaction	2. serves humanity, is essential
3. working conditions	3. preparation required
4. service to the country	4. social prestige
5. opportunities for advancement	5. requires high moral standards
6. social prestige	6. requires intelligence and ability
	7. security, steady work
	8. opportunities for advancement
	9. working conditions
II. Reasons for desired occupation for children:	II. Criteria for a young man's selection of a career:
1. economic factors	1. work satisfaction
2. service to the country	2. personal qualifications
3. social prestige	3. financial aspect of job
4. opportunities for advancement	4. possibilities for advancement
5. working conditions	5. security, stability of the job
6. work satisfaction	6. preparation required
	7. service to humanity
	8. working conditions

* American data adapted from North and Hatt, op. cit., p. 470. Slight changes have been made in their wording of responses to make comparison possible, but essential meaning has been preserved.

Interpretation and Evaluation of the Data

In the preceding section we have brought to light some of the attitudinal dispositions of Philippine workers toward the occupational structure. It may be worthwhile at this point to analyze some of these subjective facets in relation to the economic and social structure of the Philippines, since this may bear theoretical relevance to underdeveloped countries in general.

In view of the fact that the Philippines has traditionally been an agricultural country--presently over 70 percent of the labor force is engaged in farming--it may appear at first puzzling that so few of the respondents indicated an occupational preference for farming, either for themselves or for their children (about 5 percent in both cases). To account for this paradox one must consider the socio-economic status of the Filipino farmer today.

A relatively recent (1954) study of rural areas in Central Luzon[13] found that the median income for all farm laborers surveyed was about five pesos, or

13. Generoso F. Rivera and Robert T. McMillan, An Economic and Social Survey of Rural Households in Central Luzon, Manila, 1954.

$2.50 a week, and the annual labor earnings for all farm operators amounted to just $120. To aggravate the situation, land tenure has been characterized in recent years by a sharp increase in farm tenancy: in Central Luzon the proportion of all farms operated by tenants increased between 1948 and 1954 from 60 to 80 percent, and for all regions in the Philippines from 37 to 54 percent.

To meet operating expenses, most tenants (and many small farm owners) are forced to borrow at high rates, and very few of them are able to market any of their products after creditors have been repaid in kind. Consequently, "The rural economy of the Philippines is based primarily upon a combination of subsistence farming and supplemental household industry."[14]

These socio-economic factors are probably some of the important underlying reasons which explain why farming rates so low as an occupational choice among the respondents of this study.

Another set of findings, which may initially appear internally inconsistent, merits some comment. We have shown, on the one hand, that a large majority of workers indicate being either satisfied (61 percent) or very satisfied (19 percent) with their present occupation; of the relatively few who indicated dissatisfaction, blue-collar respondents outnumbered white-collar respondents by a 3:1 ratio. On the other hand, in terms of occupational preference, only about 20 percent of the total sample would retain their present occupation. For themselves, white-collar individuals had a strong preference for professional occupations, while blue-collar workers tended to desire skilled work, clerical and sales jobs, and small business positions. But in terms of occupational preference for their children, both groups showed a marked agreement in selecting the professions. What interpretations may be made of these findings?

To evaluate these findings one must again relate them to present socio-economic conditions in the Philippines. Out of a total population of about 21,000,000, roughly 38 percent are in the labor force, and the latest available figures (1955) indicate that at least 16 percent of the labor force is unemployed[15]--a far higher figure than in any Western industrialized nation. Moreover, another 2,000,000 are underemployed workers whose earnings come from part-time or seasonal jobs.[16] Therefore, it seems plausible that one factor making for a high level of occupational satisfaction among our respondents is what we may term relative gratification: relative to a labor force faced with a high level of unemployment and underemployment, workers having a full-time job will tend to feel a high level of satisfaction with their present occupation.[17]

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14. Rivera and McMillan, The Rural Philippines, op. cit., p. 42.

15. Urbano A. Zafra, Philippine Economic Handbook, Washington, D.C., 1955, p. 111.

16. Ibid., p. 111.

17. This phenomenon was noted in the United States during the peak of the depression in the 1930's. See, for example, the study done on occupational satisfaction by Robert Hoppock in 1933, cited in Milton L. Blum, Industrial Psychology and Its Social Foundations, New York, 1949, pp. 79 ff.

Relative gratification helps to account for one side of the picture, the high level of present occupational satisfaction; but we have to consider its complement, relative deprivation, to interpret why so many of the respondents in terms of occupational preference for themselves and their children would seek occupations different from those presently held, and why the economic factor looms so large as a reason for the desired occupation.

Using 1941 as a base year, wage rates for skilled industrial workers increased by 331 percent as of 1950, and for unskilled laborers by about 360 percent. However, the cost of living index between 1937 and 1950 rose by a factor of 370 percent, so that real wages (in terms of purchasing power) showed little, if any, improvement for skilled and unskilled workers.[18] In view of these facts, it does not seem surprising that the occupational aspirations of our respondents (especially blue-collar workers) stress an economic motivation, and that for many persons this is translated into preference for an occupational status different from the one presently held.

Finally, let us see whether we can interpret why occupational desire in this survey is so oriented to the professions, and to a lesser degree to being self-employed in a small business. In the Philippines the reasons most often cited in assigning a high prestige rating to an occupation were found by the writer to be, in this order, service to the country (or to the community), economic factors, social prestige, and educational requirements.[19] Looking at Table 11, it is interesting to note that these same four factors, though in a somewhat different order, are also the most commonly cited reasons in giving occupations a high standing in the United States. Of all occupational groups, it is the professions, par excellence, which best combine these components, and this helps us to understand why the professions as a group receive the highest prestige ratings, both in the Philippines and in the United States.

Mainly as a result of the American administration, a high emphasis in the Philippines is placed on mass education, and education accounts for nearly one-fourth of the nation's total governmental expenditures. Not only is teaching an occupation which is seen as contributing to the country's development, as doing a service to the country and the community, but it is also a relatively stable economic position. If a person can obtain a post as a teacher, he can be assured of full-time employment; in absolute figures the earnings may not be high, but the teacher does not have to worry about unemployment and underemployment as so many other types of workers do, so that his earnings are relatively favorable.[20]

Similarly, medicine and law are also major professions which combine relatively favorable earnings with other factors involved in giving occupations a high prestige. In improving the level of health, doctors are contributing to the development of the country. Lawyers are not only in increasing demand for their

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18. The Philippine Year Book 1950-1951, Manila, pp. 133, 143.

19. Tiryakian, op. cit., p. 397.

20. Thus, Rivera and McMillan (1954, op. cit., p. 116) found that teachers, although earning only about $2.50 a day, had the highest average daily earnings among the rural workers surveyed.

services since the development of industry and other features of the post-war situation are attended by greater legal complexities, but also their occupation is the traditional steppingstone to political office. Political office in an underdeveloped country carries with it not only great power and social prestige, but also large economic remunerations from a variety of sources.

Two other aspects of the professions are germane in accounting for their popularity in terms of occupational preference. The first is that acceptance into these occupations involves primarily technical competence obtained mainly in educational training, so that the social background of the individual is not as important as his performance in his occupational role. Therefore, even an unskilled worker may feel that his son can be encouraged to aspire to enter a profession.

The other additional factor is that of the working conditions of these occupations: the work itself is not physically arduous or monotonous, and furthermore there is a high level of independence and personal freedom in the working conditions. It seems reasonable to suggest that in an underdeveloped country such as the Philippines which not so long ago was a colonial dependency, working for others may still be unconsciously associated with memories of being subjected to foreign domination, which makes the relative independence from supervision in the professions very appreciated.

All the various factors just discussed are probably involved in making the professions as a group the most desirable, visible, and accessible avenues of occupational mobility in the Philippines.

In accounting for the occupational aspirations oriented to being self-employed in a small business, in addition to the relative ease of working conditions and freedom from supervision which we have noted in the case of the professions, an additional factor may be mentioned.

Obtaining sufficient capital and credit in this underdeveloped country is difficult for a variety of reasons which lie outside the scope of this paper, and the native population has had heretofore little experience as owners and managers in extensive economic enterprises. Most large-scale wholesale and retail businesses are in the hands of individuals not indigenous to the Philippines: Americans, Chinese, and Spanish-speaking persons who form a minority of the total population. But small business affairs can be operated with relatively little capital resources; they may not be very remunerative in terms of net income, but they are visible and accessible to the native population in terms of occupational aspiration. Furthermore, since little educational requirements are necessary to become a small independent businessman, one can understand why several respondents mentioned this is an occupational status they would desire for themselves. Given their present position and educational background, to become a small businessman represents for many respondents the greatest occupational and social mobility they can realistically aspire for in their occupational career. When it comes to their children's career, however, then the level of occupational aspiration becomes optimistically elevated to the professions.

We should like to conclude this discussion with an observation based on the data previously discussed. This study on occupational satisfaction and aspiration suggests an interesting paradox: although a strong motivation in occupational aspiration is the economic aspect, yet very few of the respondents desire for themselves or their children to engage in managerial or executive work. This is the

more puzzling since this occupational category appears not only to be financially more remunerative than any other, but also respondents presently in this category showed a greater extent of work satisfaction than respondents in any other occupational status.

In spite of this, the strongest occupational aspirations of respondents lie in the professions--especially law, teaching, and medicine. Although they have been in increasing demand, law and teaching are presently overcrowded fields in the Philippines; every year, centers of higher education turn out more lawyers and teachers than can be adequately absorbed by the occupational structure, and many of these have to take jobs incommensurate with their training.

If one were to venture a suggestion applicable to the Philippines--and perhaps to other underdeveloped areas in the initial stages of transition from an agricultural to an industrial economy--it would be to place greater stress on turning out managers and executives, and to make more manifest to the population the advantages of occupations in this category. It has been pointed out that underdeveloped countries suffer from a lack of officials trained in the public and private administration of economic affairs.[21] Our findings would suggest that this is reflected in and at least partly accounted by the fact that executive and managerial posts may not be very conspicuous in the occupational aspirations of workers in these countries. Consequently, the problem consists of two interdependent components which must be treated together: to create more of these posts and to motivate the indigenous population to enter these occupations.

Summary

This paper has discussed certain facets of the occupational structure of an underdeveloped country. The general findings concerning components of work satisfaction and patterns of occupational aspiration may be summarized as follows:

1. A large majority of respondents indicated some degree of satisfaction with their present occupation, with white-collar workers showing greater satisfaction than blue-collar workers.

2. Intrinsic work satisfaction was mentioned more than any other factor as the thing liked best about the present occupation; on the other hand, economic reasons prevailed when respondents stated the occupation they would like to be in or the occupation they would advise their children to enter.

3. In terms of occupational aspiration, about one-fourth of the total sample indicated they would like to remain in the occupation they now have. A majority of the remainder, especially among urban respondents, indicated preference for white collar work, and particularly for professional occupations. Occupational aspirations for children rested even more emphatically on the professions. Finally, although the Philippines (like most other underdeveloped countries) has a predominantly agrarian-based economy, only a very small percentage of respondents desired for themselves or their children to be in agricultural occupations.

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21. Hoselitz, op. cit., p. 184; Edward S. Mason, Promoting Economic Development: The United States and Southern Asia, Claremont, Calif., 1955, p. 51.

REFLECTIONS ON THE ADMINISTRATIVE ASPECTS OF A TECHNICAL ASSISTANCE PROJECT

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Caveat. These reflections have resulted from an assignment for one year in a university's overseas technical assistance program. This project was primarily concerned with "public administration"; my association with it was as an "economist" rather than as a specialist in "administration". Thus, from the outset, my remarks are those of an amateur. Further, since this was a limited experience, my observations are to be regarded as applicable only to this specific situation. They may have general relevance, but because of the nature of this one experience, my generalizing is unwarranted.

Immeasurability of Results. Technical assistance is obviously one of the tools of foreign policy, and its effectiveness must ultimately be judged in success or failure against the objectives of that (those) policy(ies). It belabors the obvious to indicate that the broad objectives of foreign policy are not couched in terms subject to statistical or other kinds of measurement. The same is frequently true of "country" programs and even of specific projects within particular countries or programs. This is equally true of many of the "results" of technical assistance programs. This is a familiar situation for the social scientist; broad, non-numerical objectives and sub-objectives are sought by means, the results of which are also in unmeasurable terms.

The following example illustrates the significance of the point. This university project involved an institution-to-institution relationship and close cooperation between U.S. faculty and host faculty. One joint project was the development of a public administration curriculum for a proposed night school. Three U.S. and two host staff members[1] undertook the task much as it would have been undertaken by a faculty committee in a U.S. institution. True to academic form, a disagreement developed among the U.S. members in one of the early meetings. Various points of view were brought out, and disagreement, while not violent, was obvious. One of the hosts, the counterpart of the senior U.S. member, expressed great surprise that a junior would voice disagreement with his superior. Then it was apparent to us that the junior of the two host staff members had never been asked his opinion, nor had he expressed his opinion on any of several points which had been discussed. This led to an explanation of the importance of a free discussion of matters of curriculum, course content, educational objectives, and administrative matters in developing educational programs.[2] Perhaps we were convincing

1. The numerical composition of this committee implies nothing concerning "control". Working relations between these groups were excellent, and no problem of "packing" this committee was involved.

2. On the surface, it may appear that the "international" composition of the committee was responsible for a "prepared" position by host staff members. Subsequently, we concluded this was not the case and that the kind of autocracy evidenced in this meeting was indeed typical.

because, at a later meeting, the junior person contributed to the discussions, and not always in agreement with his superior.

This incident demonstrates differences in cultures and was one small facet of the problems of technical assistance abroad. More important for present purposes, it illustrates the difficulty of measuring the impact of technical assistance. If we did rupture a bit the traditional autocracy in this foreign educational institution, perhaps this was one of the more important of our accomplishments. At stake really, were intellectual honesty, academic freedom,[3] and certainly not less important the exercise of individual initiative in the bureaucracy. Without free discussion and a free exchange of ideas among the faculty persons in this institution, intellectual honesty and any sense of academic unity will be no part of its program. An educational institution of higher learning is no place for autocracy. In assessing the success or failure of the university project, it will be nearly impossible to account for this particular contribution.

Another important activity was an attempt to develop the research "bug" among our counterparts and to develop with them some appropriate research techniques. If a half dozen host staff members are infected with this disease and it remains virulent for several years, the social science research output will exceed by many times the total output to date. The necessity for such research is obvious.

Not all results of technical assistance are, of course, as intangible as these; nor are these unique.[4] For contracting agencies, these intangibles are extremely difficult to describe in contract terms and may not be recognized as objectives, even until personnel is in the field. Further, evaluation of these kinds of achievement for purposes of contract renewal is extremely difficult.

Evaluation and Its Effects. Evaluation of intangible results as part of an effort to reach intangible objectives is at best difficult and at worst impossible. The means of evaluation and the effects of employing these means are of considerable concern. The immediate responsibility for evaluation of technical assistance projects lies in the appropriate organization of the Executive branch of the government; the ultimate responsibility of evaluation is inextricably entwined with the budget approval and appropriating powers of the Congress. These comments relate mostly to Congressional evaluations.

There are several methods available to the Congress for evaluating technical assistance in general and particular projects specifically. It receives expert

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3. "Academic freedom", as we know it (or idealize it), is a desirable objective in the host country but one which, for the moment at least, must be approached in slow and easy stages.

4. Although my experience was with a "public administration" team, I have been impressed with the numbers of problems of sociology, culture, and politics that even the "technical" (e.g., engineers, agricultural specialists, public health specialists, etc.) technical assistors encounter. Conceding the point that their results may be measurable, there is still difficulty in translating results at the operating level into effectiveness in contributing to the broad policy objectives which are essentially non-physical in nature.

opinion from appropriate executive agencies during budget hearings. These agencies are probably the most competent to evaluate because of their intimate knowledge of projects in the field, because of their professional competence, and because of their full-time concern with the problems involved. But as witnesses, their testimony is suspect because of their interests in the ultimate Congressional decision.

A second source of information is testimony of private citizens volunteered during appropriate hearings. These persons frequently have some sort of ax to grind and have sufficient motivation to go to the necessary trouble and expense of preparing a statement and appearing before the appropriate committee. Their testimony may or may not be "expert". A third source of information is private communications from constituents and others to individual members of Congress.[5] The Congressman, too, has the same media through which the public becomes informed or misinformed.

An additional source of information is staff research and contract research. Most recently, we have the reports of contract research and evaluation done for the Senate Foreign Relations Committee. Contract research is a generally desirable trend, but there is no doubt that the results can be partially predetermined by the selection of research agencies.

Another source of information is personal inspection by Congressional groups. During my association with the project, we observed (and were observed by) several groups of visiting Congressmen. None remained in the area sufficiently long to obtain the requisite information or "feel" for the situation so as to be in any position to be either helpful or justifiably critical. In general, what and whom they saw was determined by the agency being inspected. In general, too, they were told what this agency wanted them to hear. I am not suggesting that there was anything unique in this situation; but this buttresses the opinion that as a means of evaluation Congressional visitations are not, as now conducted, particularly valuable. It might be useful to consider assigning one or two members of Congress in each of several posts for a month or so during the Congressional off-season in order to obtain a more valid Congressional evaluation. (Hosting agencies would probably be driven completely to distraction by this arrangement.)

A peculiar result obtained in the program of the country being discussed because of the nature of Congressional evaluation. A special policy was developed by agencies on the ground for good and sufficient reason although this was contrary to U.S. policy in other countries. It was necessary in an emergency and was expensive. An elaborate and detailed justification of it was developed to "sell" it to "Washington" and ultimately to Congress. It is my opinion that the initiating agency "oversold" itself in the process, with the result that the policy continued after times and conditions changed to make it unnecessary and perhaps even undesirable. It was feared, I believe, that modification or discontinuance of the policy would be interpreted as an admission of error and/or vacillation after the strong justification given the policy in the first place.[6]

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5. There is an important difference between evaluating technical assistance and evaluating public opinion concerning technical assistance. Most "write-a-letter-to-your-Congressmen" communications would be of little help in the former.

6. It is not possible nor desirable here to justify my position regarding the policy. Nor can I be certain that my analysis is (continued on next page)

The necessity of evaluation and the imperfect means of evaluation leads to unfortunate biases in the selection of projects undertaken, and once projects are undertaken may give peculiar and undesirable slants to them. The tendency is to do things which are concrete and can be pointed to, seen, and counted. The numbers of schools built, the numbers of students in schools, the numbers of plows distributed, the numbers of people seeing U.S.-sponsored shows, etc., are measures of something and can be enumerated by an agency in reporting its activities. But these may not be at all the most important things to do or which can be done. It may be much more important for a U.S. technician to implant the seeds of "research-mindedness" in the mind of one Asian than for the technician to produce five research jobs on his own. Yet in the kinds of evaluations that now exist, the latter appears to be the better record.

Comments on the Use of Contract University Personnel. The earlier caveat must be repeated here with the additional warning that there are no standards applicable to assure objectivity in this analysis of the group of which I was a member. Further, certain conditions in the post environment may make this a special case.

Generally, university personnel seemed to be more professionally competent and were certainly better trained formally than were U.S. government agency personnel.[7] This was particularly true of persons in the more responsible positions. The principal reason for this was the ability to attract personnel to this particular post. Most university people accepted this assignment in part because it was in accord with their professional interests and competencies and because the experience would contribute to their professional growth. This additional "psychic" income was an advantage university recruiters enjoyed compared with governmental recruiters.[8] The facts, too, that positions were assured on return, that participants were considered reassigned and not on leave and so continued to accumulate sabbatical time and other benefits contributed to the university's advantage in recruiting. For whatever reasons, the university was able to send its better people, while I understand that government missions had great difficulty in securing professionally qualified personnel for this particular post. This supports one of the major reasons for ICA-university contracts--the ability to tap a pool of qualified personnel for what are still regarded as rather temporary assignments.

Another factor contributing to the effectiveness of university personnel was the fact that the university project was at least one step further removed from Congressional and other evaluations than other agencies in the country. This certainly removed individual members of the team from the considerable pressure felt constantly by governmental employees in the area. Contributing to this feeling of

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correct. There were those who do not agree that it became an unnecessary policy, and further I am expressing only a "feeling" that one of the major reasons for its continuance was the agency's "vested interest" in its own selling job.

7. I have no intention of including embassy and military personnel in this comparison. A more experienced colleague writes in the margin on a draft: "Surprising! often include the dregs of University staffs."

8. I do not know whether there was a substantial differential in salary and "fringe benefits" for the two types of personnel. Considering all, I suspect University personnel were better paid than governmental employees.

security was the fact that the performance of contract personnel on this assignment was not considered to be vital to their professional advancement. Most members of the team were already respected members of their departments, had published, and either had or were establishing themselves among professionals as competent scholars. Governmental employees were in a position where their performance did have a direct influence on their careers. Decision of what was to be done and how it was to be done inevitably, consciously and unconsciously, were viewed in part as to how they would affect personnel records. This increased the bias toward projects with enumeratable results; further, it was responsible for a bias away from risky undertakings (more will be said about this below).

The above could be interpreted to mean that university personnel were or could be "irresponsible". This was true in the sense that they were required to be less responsible to the authority of direct control by the governmental agencies and because of the nature of their individual positions and the status of the team they were subject to less of the personal responsibility associated with bureacracy. This "irresponsibility" could have been detrimental from the point of view of U.S. policy in this country, but in fact was not. The greater freedom and greater intellectual honesty allowed us was more boon than damage. Our "independence" (much more accurate a description than "irresponsibility") frequently was advantageous to U.S. governmental agencies for channelling information or suggesting policies with which they did not desire to be closely associated.

One of the major problems of the group was to establish working relations with other U.S. agencies. This was particularly true in the early stages before mutual confidence had been established. The nature of the university mission ("public administration") inevitably meant, in spite of a contract provision to the contrary, that university personnel would be involved in matters of policy determination and execution in the host government. Attempts to apply the contract literally resulted in considerable frustration for some period in the early stages of the contract and worked more to the detriment of some staff members than others. The two economists on the staff probably had the most difficult time in reaching satisfactory working arrangements. Basically, the U.S. agency position was that practically anything said or done by an economist would involve policy (and with this I would most certainly agree) and that therefore economists should do or say nothing. The nadir of these discussions was reached when it was suggested that lesson plans for a course in economic development in the cooprating institution be submitted to the U.S. agency in advance for approval. The problem eventually was never resolved entirely satisfactorily.[9] The agency position was made unmistakably clear any number of times on this point and was understandable. In such a "sensitive" area as economics, it did not desire to have independent opinions and advices being given to the local government which might not be coincidental with its own. For whatever reasons, this was an unfortunate experience and suggests caution for university personnel on contract whose functions lie in these sensitive areas.

University personnel, in general, established much better rapport with the local community than was established by personnel of the other U.S. government agencies. One principal reason was the fact that the university controlled no major

9. One of the two economists was eventually "borrowed" and "controlled" by the agency. This was a reasonably good solution for the person involved, assisted the agency considerably, but left the university group very short of economic talent.

purse strings and hence was not constantly having to veto proposals by the host government for local expenditures. The fact that we were "university" personnel also gave us greater prestige because of the cultural values placed on education in this particular society. Further, we were at least one step removed from being a U.S. agency and were present at the specific request of the host government. This put us in the position of being considered as sympathetic to the host government without having the axes of U.S. foreign policy to grind, too. The fact that we were not representatives, directly, of a "foreign power" also contributed to good relations in this country still smarting from the indignities of colonial domination; it was necessarily determined not even to appear to become the "colony" of another foreign power. University staff members and their families appeared to make a greater effort to establish relationships with host-country persons and enjoyed considerable success.

An Administrative Philosophy for Technical Assistance. I know of no explicit statement of the administrative philosophy for technical assistance programs; perhaps it is wise not to make one explicit. But the following is suggested as an important part of such a philosophy.

Technical assistance should be viewed by its top administrators and the Congress much as a corporation views its research expenditures. The expenditures are a necessary, integral part of the development of many corporations. A board appropriates a certain sum for such activity, knowing full well that the returns are nebulous. Researchers, especially in any given period of time, may produce results of direct value to the corporation. They may produce findings of harm to the corporation (rumors of "buried patents" are evidence of this), and they may produce findings of great or small benefit to the corporation. One researcher in the organization may never produce anything but negative results, but in so doing be extremely valuable to aiding someone else to achieve positive results.

In many ways, technical assistance is an analogous situation, and the same philosophy is applicable, if not necessary. The objectives of technical assistance are more or less clearly defined in the broad objectives of U.S. foreign policy, but technical assistance on as broad a scale as we now know it (and as it is apt to develop in the present political and economic world) is something shockingly new to us. These programs differ from colonial administration in which we are relatively uninitiated. It projects literally thousands of U.S. citizens into parts of the world about whose geography--not to mention economic structures, culture, social structures--we knew practically nothing ten or twenty years ago. It seeks to manipulate governments and something we glibly call "public opinion" in nation after nation as if we really understood how to do these things.[10] (It is not apparent that these are clearly understood as they pertain to our own culture and political situation. This is being written at the time of the Little Rock fiasco and as I read The Hidden Persuaders.)

One important difference in the comparison with corporate physical research is the difficulty not only of finding but of interpreting the results of the operation of the conglomeration of social sciences brought to bear on problems of technical assistance.

Much of technical assistance will be of an experimental nature whether we like it or not; recognizing this explicitly would be wise administration. Making the

10. Even the more technical, physical projects ultimately are seeking to do this although they may manipulate physical variables and obtain tangible results.

a part of the philosophy, making it explicit, and effectively incorporating it into operating administration would contribute substantially to the technical assistance program. First of all, failures of particular projects would not be regarded necessarily as personal failures of their advocates or administrators, but rather as one of the expected costs of experimentation. Honest reporting of these failures and the reason for the failures could contribute much to the working paraphernalia of technical assistance administrators who will be with us for a long time. Whatever else can be said of the famous British ground-nut scheme, its cost was probably well worth the value of its lessons to technical assistors of all nations all over the world. The failure stories are as important as the success stories in filling this great void of knowledge.

Further, more imaginative projects can and will be undertaken. The more imaginative projects are perhaps the more risky, offering greater returns and perhaps, too, offering greater possibilities of failure. The greater freedom from the shackles, real or imagined, of the bureaucracy and the more creative thinking, projects, and administration that can be encouraged, the greater will be the ultimate contribution of technical assistance programs. Recognition of imaginative projects should do much to improve morale of personnel in the field and to attract more competent personnel. [11]

A genuine acceptance of this philosophy, especially by top and middle management, would free field personnel from many of the frustrations attendant on the bureaucratic processes and avoid the necessities of multiple clearances, multiple project justifications, multiple audits, etc., which so slow the processes that individuals (who ultimately carry out projects) are apt to lose enthusiasm or have their periods of assignment run out, or both. It is valuable training for the individual to find out that a technique will fail; it is also valuable to give responsibility and confidence to an individual and/or team and let it work out its own salvation. Probably too much time is now spent debating the reasons why some project should not be carried out.

This asks a great deal in a political democracy because it ultimately asks Congress to appropriate money with confidence that wise people will spend wisely and asks Congress to keep its "second guessing" to a minimum or at least to a really informed basis. Ultimately, this asks the same of the voters. This can be translated into terms of appealing for a little humility on the parts of those in higher echelons, including Congress in making judgments of activities in the field. The casual and/or part-time observer, interested and intelligent though he may be, can never see and understand local conditions as well as those on the ground. Alternatively, this requires a substitution of more confidence and more delegation for the stifling controls of the bureaucracy.

Presumably this appeal could be made for nearly any governmental operation, but technical assistance presents a special case. Its unique elements are the immeasurability of results and tremendous variations in economies, societies, and cultures in which it must operate--both of which make supervision from afar extraordinarily difficult.

Some increase in graft and diversion might occur and perhaps some foolish things would be undertaken, but the program as a whole would become more vibrant and dynamic and the gains would probably far outweigh the costs. The ship of state can run aground while all the crew is busy looking for minor leaks in the hold.

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11. I recall one conversation in which a report and recommendation were censured by the U.S. government agency on the grounds that the proposal was "unorthodox". Whether the proposal was good or bad is not at issue; it was never considered because of the label mentioned above. Insistence on "orthodox" policy in these "unorthodox" situations is apt to be very expensive.

JOGJAKARTA -
ECONOMIC DEVELOPMENT IN AN INDONESIAN CITY STATE

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The regional insurrections within the Indonesian Republic, commencing with the north Sumatra revolt in 1956, have been termed by one writer "The Revolt of the Daerah".[1] Though triggered by internal dissension within the Army, it represents, so it is claimed, a culmination of local dissatisfaction both in the political and economic fields. Having thrown off the rigid shackles of the Javan-dominated bureaucracy of Djakarta, the way now lies open for local ability and enterprise to harness those potential local resources which have so far been overlooked or ignored by the central government.

The analysis would seem to imply that from now on, the existing disparity in the population-resources relationship between Java and the other main Indonesian islands will progressively widen. Alone of the major islands, Java currently fails to produce as much as it consumes. Sumatra, Kalimantan, and Sulawesi all have substantial surpluses, which applied to local development in place of subsidizing Java, must enlarge the difference in living standards. It needs, perhaps, to be added that the more favored situation of the islands now contributing most to the national export income has arisen, in large part, from the activities of aliens. But it is now urged that for the first time indigenous people have a real chance to raise the level of development in the Outer Islands.

The subsequent course of events in Sumatra raises some doubt about the seriousness of the "revolt", but there is no indication of any real progress in resolving the many deep political and economic divisions within the country. It is certain that without the substantial subsidy so far made by the Outer Islands (Daerahs), living standards in Java (one need only select per capita rice consumption as a criterion) are likely to fall. Only substantial foreign aid, large-scale emigration, or a very substantial increase in productivity per worker could provide a palliative. Indonesia has already received emergency shipments of rice from the U.S., but neither of the two latter possibilities are likely, or indeed feasible, in the near future.

It is particularly the densely populated provices of Central and East Java that pull down the general level of the Javan economy. West Java stands approximately in the same political and economic relationship to the rest of the island as the Daerahs stand to Java. This province, with its large area of export crops, originates the largest share of the island's export income, and alone of the three provinces of Java produces a food surplus. With only a quarter of the island's population, pressure on land is less severe than in the rest of Java. In potential

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1. J. M. van der Kroef, "Instability in Indonesia", Far Eastern Survey, April 1957.

sources of power and mineral wealth it appears considerably better endowed than the other two provinces. Its Sundanese people, a distinctive cultural and linguistic group, have also been involved in the upsurge of feeling against the central government.

In its teeming, overwhelmingly agrarian population, its limited resource base, its shortage of capital and limited comprehension of its function, its small fund of indigenous entrepreneurial ability, and above all, its social structure which makes it strongly resistant to change, central and east Java stand with Bengal and East Pakistan in presenting probably the most difficult obstacles to economic development in Asia. Yet this impoverished part of the country is rich in historical grandeur and traditions, and from it has come much of the driving force of the revolution. It is, according to the disaffected Outer Islands, the Javanese people of central Java who have appropriated most of the material benefits of independence. It hardly needs to be said that these benefits have accrued entirely to an educated and privileged minority, and that the tani has been largely ingnorant of them.

Prophecy is a tempting but dangerous occupation. Should the tottering Indonesian economy collapse, or if existing political dissension should become more acute so that the centrifugal forces in the country are strengthened, a rump Java would find itself in a parlous situation. Central Java, forced to rely upon its own resources, can hardly form a viable economic unit. But developments since the Sumatran revolt make some readjustments in the previously heavily subsided provinces of Java compulsory; a closer approach to equality between production and consumption must be achieved. It is possible that these adjustments may come suddenly and violently, but it is also possible that they may be achieved gradually and within the framework of the existing social organizations. Some indication of the form this latter development could take is afforded by the Daerah Istemewa (Special District) of Jogjakarta, where a modest program of economic development, based on local traditions and involving no social reorganization, is taking place.

The Daerah includes the Sultanate of Jogjakarta and the small Paku Alaman, the territories of the two hereditary rulers that before the revolution constituted the Principality of Jogjakarta. Its present status as a "Daerah Istemewa" recognizes both its historical importance as the legitimate heir to the grandeur of the Javanese empire of Mataram, and its role in the revolution. The empire of Mataram finally disappeared in 1755, when its remaining territory was shared by the Dutch between the Susuhanans (rulers) of Surakarta (Solo) and Jogjakarta. Preserved through historical accident as "Native States", the aristocracies of these petty princedoms were thus able to maintain a key position in higher administration, a function which elsewhere in the Netherlands Indies was the sole preserve of Europeans. Many members of these old aristocracies now hold similar high office in the Indonesian Republic, the most senior officials being almost always of this class. With the demise of the larger and wealthier Solo, which failing to foresee the ultimate success of the revolutionary movement threw in its lot with the Dutch, Jogjakarta became the sole heir to the legacies of the old Javanese empires. The revolutionary war maintained the tradition of opposition to foreign domination inherited from Mataram and Prince Diponegoro, and for a time the city became the seat of the Republican Government. The spirited defense, maintained after the rest of the Island had been re-occupied by the Dutch, produced the bitterest fighting of the war.

These distinctive features of Jogjakarta are brought to a focus through the princely line itself, particularly in the person of the Sultan (Hamengku Buwono).

Through its support of the revolutionary cause, the Jogjakarta house has avoided the fate of the titular heads and rulers of the former Netherlands Indies, who owed whatever rights and influence they possessed to the Dutch. Not only has the Sultanate survived war, foreign occupation, and revolution, but the Sultan himself is a figure of considerable national importance; an ex-Cabinet minister and supporter of Hatta, the Sultan is one of the few Nationalist politicians untainted with corruption.

Its status as a "Special District" gives Jogjakarta greater freedom of action than any other part of Java. For general administrative purposes the Daerah is included within the province of Central Java, but in practice the Daerah is a province in its own right; in all statistical returns it is listed separately, as before the war. All the principal Ministries have offices within the city, in direct contact with Djakarta. There is, however, another "Department", the Office of the Sultan, and the Sultan, who is the official representative of the central government in the Daerah, acts as an effective "Overlord", or super Minister. Thus though the Sultanate exists only in the person of the Sultan himself, he is no mere figurehead, in practice he has retained all of his political influence and financial privileges, and unlike the Sultans of the Federation of Malaya, is in large measure a ruler in fact, as well as in name. Since his resignation from the Cabinet in 1952 the Sultan has exercised considerable skill in avoiding a definite stand on any of the major issues that divide the country, and has concentrated his energies on development problems of the Daerah.[2] At times the Sultan has acted in ways reminiscent of the head of an independent state in his efforts to obtain financial assistance from abroad.

The preservation of the unique position of the Daerah in the Indonesian nation is also facilitated by the attitudes of the senior officials of the various Ministries, both in Regional offices and in Djakarta. With strong local loyalties these officials regard themselves firstly as Javanese rather than as Indonesians, and although the old aristocrat titles were officially abolished by the central government shortly after the revolution, their use is jealously preserved by those entitled to them. In Jogjakarta, then, policy is conceived and implemented by the uppermost stratum of Javanese society, which is inevitably concerned with the preservation of traditional Javanese culture patterns. Raised to power by the revolution, this group has so far been conspicously successful in making the winds of nationalism blow in its favor. The Sultanate has already endured almost two decades of social upheaval and instability; what are its prospects of survival in a country where there is every evidence of rapidly increasing Communist strength? This would appear to depend on the influence and attraction that traditional values can continue to exert, and it must be confessed that these values are likely to be greatest to those who benefit most from them--the old aristocracy, the middle class and the larger landowners, village headmen, and other officials--in short, all those who have prospered or whose position has been confirmed by the revolution. Their present appeal is much less to the tenant and the peasant who owns no sawah, and less still to the laborer dependent on casual employment.

Nevertheless, the post-revolutionary changes have undoubtedly brought substantial economic improvement to many inhabitants of the Daerah, and in basing its development policy on deeply rooted features of the cultural heritage, the Daerah is following the precept of the President himself, who has declared that gotong

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2. The Sultan did not, for example, come out in support of the leaders of the rebellion in central Sumatra, as they had hoped.

rojong, the traditional village "self-help" in which all members of the community assist in the furtherance of the common good, is to be the instrument by which the living standards of Indonesia will be raised. Industrialization, since capitalism is specifically rejected by the Nationalists as well as the Communists, thus becomes largely a state responsibility. Every effort has been made in Jogjakarta to get as large a share as possible of investment by the central government, while the two hereditary princes have also applied substantial sums from their own private resources to development projects. They are in effect among the largest capitalists in Java. In his dealings with the F.A.O. and in negotiations with the government of East Germany over the supply of a sugar mill on extended credit, the Sultan aroused considerable opposition through his direct approach, by-passing the central government. As an initial target the Sultan has adopted the restoration of the 1940 production level of those activities which have since declined or disappeared. It is a goal which could well be adopted by the central government.

Apart from its political singularity, Jogjakarta is, nevertheless, a mirror of Central Java, in which all of the Province's physico-human relationships are clearly visible. In fact, a comparison of population and agricultural resources appears more unfavorable in the Daerah than in the Province. There is a higher proportion of upland and mountain unsuitable for sawah; about three-fifths of the total area of the Daerah, which amounts to about 916 square miles, consists of land of this type. This large area of rough topography makes it unlikely that the proportion of cultivated land in sawah can ever be raised to the level of Central Java. In the recent past much of this upland area was forested, but through the illegal clearing and cultivation of squatters, who have considerably increased in numbers since the revolution, only a few patches of forest still remain. This problem, of course, is common to all of Java and, indeed, to many other parts of the country. Year by year the inevitable consequences of deforestation--accelerated erosion, the silting of rivers and irrigation channels, and increased flood hazard--make agricultural improvement progressively more difficult. In the barren Gunung Sewu, part of a mountain system which is absent in the rest of central Java, Jogjakarta contains perhaps the only area in Indonesia where the population is never far from the margin of starvation.

Despite a lower proportion of flat, level land suitable for sawah cultivation, the overall population density in the Daerah is considerably higher than in the province of central Java as a whole (about 625 as against 500 persons per square kilometer), while the population density in relation to the sawah area is not far short of double. Even allowing for the large urban population of the Daerah, it is apparent that there are remarkable variations in population density within the district, which in this respect resembles the national, rather than the regional, pattern. On the best soils, those south and west of the great volcano Merapi, which dominates the city, population densities were well over twice the average for the island as a whole in the 1930 Census, and closely approach the recorded maximum. On the karst-like Gunung Sewu population density fell to the level of the most scantily populated parts of the Outer Islands. There is no reason for believing that the general pattern of population has since changed in any material way.

The lower proportion of the cultivated area that is under sawah in Jogjakarta (about 30% as against almost 40% for the province), even allowing for a higher incidence of multiple cropping, is to some extent offset by a higher productivity, for the yield of paddy per hectare is normally higher than the provincial average. And the cultivation of tegalan (dry fields) has been pushed so far that the proportion of

the total area that is cultivated is slightly higher than in Central Java. But both province and Daerah are normally food-deficit areas, whose rice requirements can only be satisfied by imports from other parts of the country or from abroad to supplement local production. In fruit and vegetable production, encouraged by the large urban market, the Daerah is self-supporting, for unlike rice, these products are perishable and cannot stand transport over any distance. The production of these food products is relatively most important in the uplands to the southwest of the city. On the plains, agriculture is extremely labor-intensive; most sawah produce three paddy crops a year, or two crops of paddy and a crop of polowidjo--rice substitutes such as maize and sweet potatoes, and supplements such as soybeans and groundnuts.

These agricultural practices are essentially similar to those of the rest of central Java, but the revolution has completely overturned the old agrarian organization in the former "Vorstenlanden" (i.e., the Native States of Jogjakarta and Solo), and the agricultural changes that have taken place are greater than anywhere on the island. If increased rice output is a criterion, the post-revolutionary period has seen greater progress in Jogjakarta than in Central Java, or in the island as a whole. But it is difficult to avoid the impression that the opportunities afforded by the revolution for improving the lot of the cultivator have been far from fully realized. The basis of the change is to be found in the considerable differences that existed between the agrarian situations before the war in the Vorstenlanden and the directly administered territories.

In the Native States the feudal obligations of the old Javanese "apanage" system endured much later than in the directly administered territories. Right up to the outbreak of the Second World War the disabilities of the Vorstenlanden peasantry were distinctly greater than in the rest of Java, as a result of the survival of this system and the long drawn out process by which it was to be ultimately eliminated--the Conversion Decrees of 1918. The reason for the retention of the system, which had long ceased to be in accordance with social needs, was undoubtedly the European planting interests, particularly those concerned with sugar and tobacco--and the desire of past rulers for easy gains. The European estates in the Vorstenlanden were more highly privileged than anywhere else in the Netherlands Indies, and were already well established when the so-called "Liberal" policy, which threw open the door to the employment of private enterprise in the Netherlands Indies, began about 1870. Before that time the "Culture System", which had made use of compulsory labor, had reserved export production to the government. In essence, the Culture System came to survive in the Native States, with the difference that it was operated by, and on behalf of, private interests.

The sugar and tobacco plantations, it is true, only occupied a small proportion of the area of the old Principality; in 1939 there were some 17 sugar and tobacco estates with a total planted area of 7,428 hectares. But these estates were concentrated in the most productive and populous parts; before the Great Depression, when the planted area was much larger, these industries closely affected the lives of all the cultivators on the best sawah. In the old "apanage" system the ownership of the land rested with the ruler, or Sultan, who as in other feudal systems, delegated his rights to others. The transference of these rights to non-Indonesians appears to have begun very shortly after the creation of the Principalities. But it was only after 1810 that European interests, desiring to produce crops for the European market instead of native crops and requiring lengthier growing seasons and considerable investment, sought leases for longer

than the six-year periods that had been granted previously. Strictly speaking, the land itself was never leased--it was the right of usufruct. This development met with the opposition of Governor-General Van der Capellen, but it proved impossible to resist in the face of the desire of the rulers for gain.

Thus there grew up on the shaky legal basis of the old feudal system the "clebagan" system of cultivation for tobacco and sugar, in which the rights of the feudal apanage holder, or patuh, were taken over by the planter. But in this process the population suffered considerable loss. In the last analysis, of course, the system depended on force. The planter was not interested in the patuh's share of one-half of the crops; what he wanted was the land and the labor to work it. The planters claimed, and received, that labor which the population had to provide to produce the share of the crop it owed to the patuh. The population also in effect gave up to the planter half of their land, for the land was used alternately by the planters and the villagers. Moreover, the crops grown for the European market took longer to mature than rice; in the case of sugar the planters occupied the land for 16 to 18 months, leaving the villagers only a 6 to 8 months occupancy in a two-year period. There were compensatory payments for this extra period, but the loss of the use of the land for such a long period was a serious hardship to the local population. Moreover, the cultivation of certain crops, e.g., groundnuts, was forbidden on land that was to be planted in sugar. The compulsory labor dues often proved arbitrary, and in practice were outside the control of the local administration. In the retention of a system of compulsory labor, the agrarian situation in the Native States was a feudal anachronism, overdue for reform and a potential cause of serious social unrest.

In 1918, an attempt was made to bring the agrarian situation in the Native States into line with the directly administered territories, and to abolish the system of compulsory unpaid labor. However, the opposition of the planting interests was such that though compulsory labor was abolished, the sugar and tobacco industries still retained greater privileges than elsewhere in the island. Under the conversion, which was carried out in Jogjakarta between 1920 and 1925, the planters were allowed to retain all those rights they possessed in the old contracts; they could use as much land as they had before and were guaranteed the right of usufruct for 50 years. As compensation for the payment of the new free labor (the estates were in fact allowed to obtain labor by compulsory means for five years after conversion), reductions of rent were also made. It was not until 1935 that all the Jogjakarta estates were to pay the full rent. [3]

Thus, in contrast to the other sugar areas of Java, the planters in the Native States obtained half of the village sawah instead of a third, and as an inducement to conversion, received a depreciated rental. It is hardly surprising that despite the absence of ratooning, a standard practice in other cane-growing areas of the world, this system was extremely successful in producing low-cost sugar for a long period. It is true, of course, that the great bulk of the world's cane sugar is produced under conditions which demand, and help to confirm, a large supply of cheap labor. The contribution of the sugar and tobacco industries to the local economy lay not only in the direct payments it made, but the heavy applications of fertilizer undoubtedly helped to raise yields in the following wet season when the land reverted to paddy.

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3. G. Schwenke, Het Vorstenlandsche Grondhuurreglement in de Practijk en het Grondenrecht in Jogjakarta, Jogjakarta, 1932, p. 41. The estates obtained further rent reductions during the Great Depression.

Employment as field hands was also the most remunerative occupation to those without land. But it cannot be denied that under the system of plantation agriculture in the Native States, the villager fared worse than elsewhere in Java where estates rented village land under the Land Rent Ordinances, and the whole impact of the European capital-intensive agriculture on Javanese peasant society was such that the economic mobility usually stimulated by large-scale investment failed to appear.[4]

The sugar industry in Jogjakarta was severely affected by the Great Depression, but by 1940 there were still 11 mills in operation. Tobacco cultivation, in contrast, was only moderately affected. Commercial production of both crops came to an end with the Japanese occupation. It is scarcely surprising that during the revolutionary war, the remaining mills and curing houses, the symbols of the detested "wisselbouw" (the system of alternate cultivation of peasant and estate crops) were destroyed, and that the whole system was abolished by the young Republic.

The immediate result of the destruction of the old system was to free sawah for paddy cultivation. There has thus been an increase in the planted area and of rict output--the latter is now about 15% above the pre-war average. But there is little indication of any permanent increase in yields, just as in the island as a whole and in view of the considerable increase in the rural population, it is highly probable that productivity per workers has declined.

Yet the revolution did provide an opportunity for a more fundamental agricultural reorganization, which could have laid the foundations for that higher productivity of both soil and labor essential to higher living standards. Both before and after the Conversion of the 1920's, fragmentation and subdivision continued to reduce the size of villagers' plots and to create a class with no sawah land or the right to its use. The Conversion following the Vorstenlandsche Grondhuurreglement did nothing to solve this problem in Jogjakarta, though in Solo an attempt was made to provide all rural workers with the use of land by redistribution. The planters, guaranteed the right of usufruct for 50 years, were indifferent as to how the native population divided the use of the land among itself. Later regulations in Jogjakarta aimed at preventing the alienation or mortgaging of the villagers' right of usufruct, but such paper regulations proved ineffective against economic pressures.

It would not have been easy to devise an agrarian system that could reconcile higher efficiency with a larger measure of social justice, but in the revolutionary fervor, it might have been attempted. But the post-revolutionary settlement, like the changes three decades earlier, merely confirmed existing rights. As in a number of other revolutionary movements, the section of the rural population in most need found that it had been passed over. Subdivision, fragmentation, and increasing landlessness originate in the cultural framework, which, according to the President, is to continue to form the basis of Indonesia's national development. Whatever reorganization is necessary in the village can be carried out through the traditional mutual aid, gotong rojong. The substantial increase in the Communist vote in local elections in central Java, however, would appear to indicate that the agricultural changes are still some way from meeting social needs.

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4. C. Geertz, "Capital Intensive Agriculture in a Peasant Society; a Case Study", Social Research, Winter 1956.

Yet there is no doubt that the elimination of the planters has left the population as a whole considerably better off than before. Rice prices have remained at a high level since the revolution, though government agencies with powers of compulsory purchase have reduced the tani's incomes, and the high prices have benefited speculators and those with contacts with high officials in the administration, much more than farmers. The new agricultural enterprises that have appeared in the Daerah are many, but it is not certain that the cultivator is receiving his fair share of the returns. The Daerah has witnessed a revival of the tobacco industry, though the organization of production is now completely different. The old "Vorstenlanden" tobaccos, produced by the estates, were dark, air-cured, cigar tobaccos, destined for an overseas market. The present tobacco cultivation is now, like the sugar industry, directed to the home market and consists of the production of light flue-cured Virginia types of tobacco for the domestic cigarette industry. Indonesia's preference for these types of tobacco is part of a world-wide trend, and has necessitated the import of considerable quantities of foreign tobaccos. The new types of tobacco are produced by farmers for co-operatives, who control the curing sheds. It is common knowledge in the country that the operation of the cooperatives has considerably augmented the fortunes of the larger farmers at the expense of the small; the latter find it difficult to avail themselves of the facilities of the cooperatives because of their chronic shortages of cash.

The capital-intensive nature of the sugar industry, with its elaborate processing, has prevented the development of cooperation in the sugar industry, and the revival of the industry in the Daerah has had to await the completion of the sugar mill, built under an aid agreement concluded by the Sultan with the government of East Germany. The mill, a large one by pre-war standards, will handle 3,000 tons of cane per day in the season, and produce about 25,000 tons of sugar, about 22% of the pre-war output. Its cost is to be repayable over a period of 8 years. The erection of the mill has been considerably delayed, but it will commence operations with the 1958 harvest. It appears certain that the mill's cane will continue to be supplied by smallholders, who have been accounting for an increasing proportion of the national cane production. It is unlikely, however, that the management of the new mill be able to resist the political pressures that will compel it to employ many more workers than are necessary, and despite the new equipment, output per worker is likely to be low.

In the agricultural sector, then, the economy of the Daerah has undergone many fundamental changes since 1950, but it is not clear that the area has been any more successful than other parts of Java in grappling with its agrarian problems. Some experiments have been made to raise the productivity of the rural worker by cultivating the land of a number of villagers as one unit and sharing the proceeds on the basis of the individual holdings. This extension of the cooperative principle is one way of achieving a much needed increase in farm size, and similar mutual aid has also been employed on irrigation improvements. On the whole in Jogjakarta, where the right of individual ownership of the land has never existed, it does not seem that a "mutual aid" of the Chinese Communist variety would meet strenuous resistance.

A market feature of the post-revolutionary period has been the rapid increase in the population of the large Indonesian cities. This growth has been greatest in the port cities with their manufacturing and commercial activities, but is has been shared by almost every city. Jogjakarta is anomalous in that it alone has lost some

population since the revolution. But unlike most cities in Java, Jogjakarta is an indigenous foundation, owing little to foreign influence, and it is that rare phenomenon in Southeast Asia, an indigenous city that has grown to large size. Its period of rapid growth came during the revolution, when as the seat of the revolutionary government, its population rose to almost one million. But after an initial decline consequent upon the transference of the government to Djakarta, its population has again commenced to rise.

Though it does not share the commercial activities of the north coast port cities, where the post-revolutionary social and economic changes have been greatest in Java, Jogjakarta has unquestionably become more important in the life of the nation. The city was selected as the site of the first new University created by the Republic, now the second largest in the country, whose students, drawn from every part of Indonesia, form the most conspicuous element in the city's population. The kraton, the old walled city, still houses much of the University, while the new campus is being constructed north of the city. With a total city population of about half a million, including the suburban and kampong fringe, out of a total for the Daerah of about 2.25 million, the ratio of urban to total population is considerably higher than in the Province, or even the country as a whole. The high proportion of urban dwellers derives partly from the survival of the court and the introduction of a limited introduction of Western industrial enterprise, and partly from political accident, which in effect created a "city state" by depriving the city of part of the territory which earlier was tributary to it. Like all large Indonesian cities, there is a sizeable population of Chinese traders and retailers, who came into the "Native States" in considerable numbers with the development of the sugar and tobacco industries.

Despite its apparently unfavorable location and slender resource bases--the Daerah possesses virtually no minerals except the commoner building materials, and only very limited supplies of fuel and power, all drawn from outside the area, industrial development has proceeded further than anywhere else in central Java, with the exception of large port cities. It remains to be seen whether the newer industrial activity, which is largely a joint enterprise of the central government and the hereditary Princes, is viable.

Before 1940 industry in Jogjakarta, as throughout Southeast Asia, was of two kinds, viz., indigenous small-scale and cottage industries seldom employing more than six workers, and large-scale factory industries representing the application of foreign capital and enterprise. In addition to the commoner rural indigenous industrial activities in Java, such as hand loom weaving, basketry, pottery, tiles, etc., Jogjakarta possessed a number of handicrafts whose products, of a luxury or semi-luxury nature, show their dependence on the patronage of a princely court. Many of these handicrafts are located in the old city, or at Kota Gede some four miles to the east, a former royal seat with a long tradition of indigenous entrepreneurial activity. Their proprietors are persons of wealth and standing. Of these craft industries, batik, a method of applying designs to cloth, though the word is often used to describe the finished cloth itself, is the most important and has the best possibilities of expansion.

The manufacture of batik is widespread in central Java and in the adjacent portion of west Java, and as batik is worn throughout the country by both sexes, it is an industry of considerable importance. "Jogja batiks", employing blue and brown designs, are produced throughout the country, the typical unit of production

being a cooperative. Batik produced in Jogjakarta city is a luxury product, in whose manufacture as much as 200 hours of labor may be expended, and its production is in the hands of an entrepreneur who is also engaged in other handicrafts. The market, though limited, is nevertheless an assured one, for a quality batik with a hand-drawn design is an indispensable prerequisite for social standing at any gathering. But over one million meters of batik material are consumed annually in the Daerah, and an industrial organization of this kind, which makes no use of power, cannot satisfy such a demand.

So desirous is the Sultan of the establishment of an industry that would in part satisfy this demand that an approach was made to the F. O. A. for assistance in the erection of a spinning plant to produce yarn for both domestic and factory weaving. It is still hoped to obtain foreign assistance for such a project. In view of the considerable difficulties that have been experience by the Indonesian textile industry, mainly located in west and north central Java, it appears doubtful if a location well inland is economically feasible for an industry entirely dependent on imported raw materials. The very limited domestic textile industry in Java is in marked contrast to India, but is common to much of Southeast Asia; hand weaving is largely confined to outwork on materials and equipment supplied by the mills in the main textile centers. The relatively poor development of the domestic industry arises in part from the absence of cotton cultivation, for though the crop could certainly be grown in central and east Java, land is too scarce to be used for other than food crops. But in view of the limited cotton cultivation in other parts of Southeast Asia where conditions would seem propitious, and where there is no acute food problem, it would be unwise to attribute too much to this. It is one thing to attempt to preserve the viability of a small industry against the competition of the factory-produced article, but it is immensely more difficult to recreate such a small industry where it has died out and was never very strong.

The other craft industries of Jogjakarta, like batik, make no use of power, and have limited opportunities of expansion. The include kulit (leather work), horn work, and silverware, and are heavily dependent on the tourist trade (which Indonesia has done surprisingly little to encourage) though a small export trade in silverware has recently been developed. Some of the silvermasters' establishments, located in the masters' own houses, may employ 30 or more workers. It is accepted that these industries can play only a minor role in future economic development, though a small training center in these handicrafts is maintained by the Ministry of Economic Affairs.

It is in the field of large-scale factory industry that the Daerah has made the greatest efforts, a striking development, for industry of this type in Indonesia is virtually confined to the principal port cities and the processing plants of the estate companies. Except for the post-revolutionary industrial projects of the central government, their ownership and management is entirely in alien hands. The large industrial establishments in Jogjakarta all originated as a result of foreign enterprise and were of the estate processing type. Their singularity lies in their transference from Dutch to Indonesian ownership, but like most other liquidated foreign assets in the country, at prices which were only a fraction of their replacement cost.

The larger of the two major industrial establishments, which both employ about 500 workers, is the Pedjebit iron and engineering works, the third largest engineering plant in the country, and the largest industrial enterprise of any kind in central Java. The plant originally was erected in the inter-war period to service

the 17 mills operating in the Jogjakarta area, and its equipment was suitably massive. In 1950, consequent upon the destruction of all the Jogja mills, it was acquired by the Sultan and the Bank Industri Negara, and has since been converted into a general engineering plant to produce many metal articles formerly imported. Its subsequent history illustrates many of the difficulties that have beset industrial development in the country.

In the first place, the efficiency of the plant is low, nor could it have been otherwise. Though its forge, foundry, and machine shops produce a wide variety of products--rubber mangles, rice boxes for supply to Sumatran colonists, vises, rollers, presses, tanks, cisterns, pulley blocks and shackles, pots and pans, etc.--they are produced on machinery quite unsuitable for such work. An enormous lathe slowly turning a small piece of metal is a depressing sight. It emphasizes the acute shortage of equipment in the country--everything at all usable has to be pressed into service. The inadequacy of the machinery is enhanced by the low level of skill of employees, most of whom have acquired whatever skill they possess in the plant itself. The impossibility of obtaining sufficient skilled workers has necessitated policy of recruiting young workers direct from school and training them in the works. Labor of this kind accounts for about 40% of the work force. The higher management, at the time of the writer's visit, was Indonesian, the manager himself having had industrial experience in the U.S., though the accountant was of Dutch ancestry. Since operations began in 1950, output per worker was raised from 2,000 Rp. per year to 10,000 Rp. per year by the end of 1955, but a further 40% increase in output per worker was needed to attain competitive efficiency with foreign-owned plants in Surabaja. This target would be realized, it was hoped, by the end of 1958.

The Pedjebit ironworks represents a worthwhile attempt to utilize an asset for which there was little prospect of employment in its existing form, but its future economic position seems far from assured. New capital equipment is urgently required. It is difficult to resist the conclusion that for its present functions, the works is poorly located. As 80% of the raw material used at present is of local origin and consists of the scrap from the demolished sugar mills, this is not so much of a handicap at present. Only the balance of raw materials, in the form of pig from South Africa and West Germany, is imported, but this proportion must inevitably increase with the passage of time, and an interior location will then be a considerable handicap. But more important appears the division of responsibility between production and distribution. Disposal of the output is in the hands of an agency of the central government, and as the plant's products are not competitively priced, there is a substantial stockpile. Many items are disposed of in government sponsored activities, e.g., in transmigration. In effect, the works is a government controlled undertaking which does not depend on covering its costs for its continued existence.

The other example of large-scale industry in Jogjakarta, apart from the new sugar mill which has only recently commenced operations, is the Taru Martani cigar factory. This plant has fewer problems and appears to be established on a much more solid basis. Completed shortly before the war, it has efficient modern machinery. Apart from the timber dressing and box making shop, it employs unskilled female labor, easily recruited and trained. The plant was intended to operate on locally-produced tobacco, grown under contract by smallholders, and its products were mainly intended for the Dutch and European market. In the changed social and economic climate of the post-revolutionary period, the original

basis of the plant has undergone some modification. Local growers now concentrate on Virginia, or cigarette, tobaccos, so that the plant has to rely on filler tobaccos from Besuki in east Java. Unless it can re-establish its link with local sources of supply, Jogjakarta seems to possess no special advantage in cigar production, and there have been difficulties in maintaining foreign markets. However, as a state-owned enterprise (the plant was purchased by the Paku Alam and the Bank Industri Negara), the plant has been relatively free of the recurrent labor troubles which have hindered the operation of private tobacco manufacturers and have led the largest firm to consider seriously a withdrawal from the country.

The new sugar mill, which recently has commenced with the grinding of the first crop of cane grown in the Daerah since 1949, gives Jogjakarta a trio of large-scale factory enterprises. By Indonesian standards the mill is of large size, though modest compared with those of other countries. It remains to be seen how far economic conditions permit an expansion of sugar production in the Daerah. After a period of initial rapid growth, Java's sugar production has remained comparatively stationary in the past few years, and the restoration of the pre-war level of production still appears distant.

Large-scale industry in Jogjakarta has thus all had an origin in the local agriculture, and it is uncertain how far any other basis is possible. And while the interests of the Princes in part arises from the opportunity to acquire foreign assets at knockdown prices, nevertheless, there has been a marked reluctance on the part of Indonesians with capital to engage in manufacturing activities in the face of the substantial profits that could be earned in commerce and distribution.

Tertiary activities, as throughout the country, are mainly in the hands of the Chinese; the main commercial thoroughfare in the city is lined with well stocked and brightly lit Chinese shops, whose trade is given a substantial fillip by the 12,000 students of the University, some of whom at least receive government allowances far in excess of their previous incomes. Discrimination against the Chinese has been a marked feature of national economic policy, and shortly after the revolution a number of shops in the main business street were acquired by the authorities and turned over to war veterans. Within a very short time, however, they had all reverted to Chinese ownership. Though local feeling is strongly anti-Chinese, this xenophobia is not shared by the student population.

Thus, the political and social changes created by the revolution have resulted in far-reaching changes in the economic structure of the Daerah. The large foreign enterprise, which dominated the local agricultural scene and reduced the *tani* to a position of extreme economic and social inferiority, has disappeared. As elsewhere in the country, the new conditions have made it easier for the large farmer to enrich himself and to add to his holding, while the small farmer has found things becoming progressively more difficult. But it is quite certain that both Jogja and Java cannot continue to support so many farmers and have any hopes of economic growth.

In its agricultural policy the Daerah has so far acted in accordance with the traditional values of *gotong rojong* and cooperation, but has probably succeeded in enlarging the share of the peasant in those agricultural activities that were formerly geared to the foreign enterprise. A similar observation could, however, be made about the sugar industry in the rest of Java, which affected all the best *sawah* in those parts of the island where the climate was suitable for cane cultivation;

everywhere the economic position of the tani or the smallholder producer, in relation to the estate company, has improved. But it is not easy to see how a substantial improvement in agricultural productivity can come about, either in Jogjakarta or in Java as a whole, without some far-reaching change in social structure, a development which is hostile to the ideals of the revolution.

There are greater differences in industrial policy between the Daerah and Java. The Daerah, in adopting a limited objective, appears to have behaved in a more practical manner, in contrast to the multiplicity of schemes and plans which have characterized national industrial development. Central Java, however, seems to have got rather less than its share on a population basis of the investment by the central government in industrial development. This is, of course, conditioned by other things apart from population (which, however, does carry votes)--the location of raw materials, transport facilities, proximity to markets or sources of supply. But there is a suggestion that Jogjakarta, through its political influence, has obtained an inordinately large share of developmental investment in central Java, and that some of this might have been better employed elsewhere. It was seen that the viability of some of the new industrial activity is open to question, but in general those enterprises that utilized raw materials, or could perhaps do so in the future, would probably succeed. Yet every politician endeavors to obtain as large a share of development as he can for his constituency, irrespective of the fact that other parts of the country might be better suited for some projects.

In a highly developed country, where there is a high degree of indeterminacy in the location of many industries, such errors in location may not have a serious effect on the national economy. But in an economy at the stage of development of Indonesia, it is imperative that new industries be not burdened with high costs through unsuitable locations. Unfortunately, there are a number of new industries in Indonesia which do appear to have been handicapped in this way.

However, it is accepted that the economic problems of the Daerah cannot be solved in a local context; the shortage of power will constitute a great obstacle to further industrial development, for example. It is only within the framework of an expansion both in the province and in Java itself that the Daerah can find the higher living standards it so much desires. In the changing Indonesian political scene, the influence of the Sultan, which has so far been the Daerah's greatest asset, could well become a liability.

A NOTE ON CITY SIZE DISTRIBUTIONS

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Many investigators have been interested in developing a theory or theories of the size distribution of cities; the problem is integral to the development of rational theories of regional structure and growth. In a recent article in this journal, Beckmann[1] has presented a number of interesting statistical hypotheses which might be used to measure the size distribution of cities. The present note discusses briefly some empirical results involving one class of the hypotheses which Beckmann describes. This may be a useful footnote to his paper.

The hypothesis at issue is the "rank-size rule" for estimating city size. In its simplest form, the rule can be put as follows:

$$P_i = \frac{P_1}{R_i^b}$$

where P_i is the population of the i^{th} city; P_1 the population of the largest city; R_i the rank of the i^{th} city; and b is a constant. Beckmann notes that this is a Pareto distribution and in the usual form for the rank-size rule, b is assumed equal to 1. It has been alleged that the rank-size rule (with b = 1) is a good working approximation to the hierarchy of cities. Much depends on what is meant by an "approximation", since on a subjective basis some rather rough correspondence might be acceptable.

Some time ago, in the course of other research, we had occasion to make some simple tests of the rank-size rule to determine its usefulness in prediction. Various forms of it were tried, first with b = 1 and later with b derived from the data.

With b = 1 tests were tried on five samples of 100 cities: U.S. in 1890, 1920, and 1950; U.S. metropolitan areas in 1950; USSR in 1950. Chi-square tests applied to these data showed divergences between the computed values and the actual values much higher than would be attributed to chance alone.

Next, using data on the largest 100 cities for the U.S. in 1890, 1920, and 1950, and for the USSR in 1926, 1939, and 1950, a least squares line of the form

$$\log P_i = \log P_1 - b \log R_i$$

was fitted to each of the sets of cities. The derived values for b, which are of greatest interest, are shown in Table 1.

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1. M. Beckmann, "City Hierarchies and the Distribution of City Size", this journal, Vol. VI, No. 3 (April 1958), pp. 243-248.

Table 1. Values of b

Year	U.S.	USSR
1890	.95	-
1920	.90	-
1926	-	.76
1939	-	.76
1950	.90	.67

Two tentative conclusions can be noted from these values (aside from the fact that they are different from 1). First, there seems to be some tendency for the values to decline historically. This means that the smaller cities grow more rapidly so that the relative differences between cities are declining. Second, the hierarchy of American cities is more "peaked", that is, relative differences are larger than in the USSR.

As an alternative to the above, a least squares line was fitted using the (logarithm of) cumulative population living in cities of rank R_i or higher as the dependent variable. Two sets of cities in addition to those mentioned above were included: U.S. cities in 1930 and 1940, and only the 50 largest cities were chosen. The regression coefficient values obtained are as shown in Table 2.

Table 2. Regression Coefficients

Year	U.S.	USSR
1890	.351	-
1920	.349	-
1926	-	.375
1930	.345	-
1939	-	.393
1940	.344	-
1950	.366	.444

For a given level or rank of city the figures for 1890-1940 for the U.S. show a declining historical rate of increase in cumulative population; but 1950 shows a rise again. For the USSR a rising rate exists for the whole period. These figures should not be confused with the rate of urbanization, since they have nothing to do with the ratio of urban to total population.

Finally, to show how rankings of cities in the U.S. have changed over the years pair-wise rank correlations were made for the 100 largest cities for 1890-1920; 1920-1950; and 1890-1950. The coefficients of rank correlation were .333; .320; and -.797 respectively.

In summary we concluded that the rank-size rule (with b = 1) for predicting city size was quite unsatisfactory. Some improvements can be obtained by deriving the values of b from the data, and it is clear that the values so obtained will be (substantially) less than one in most cases. Whether the improvements are sufficient to make the method useful depends in large part on the margin of error which can be permitted by other considerations in the problem. We found some of these techniques of moderate usefulness. But these are very simple constructs, and the investigator seeking a more satisfactory theory of city hierarchies and city size will, as usual, have to resort to more complex formulations.

ECONOMIC GROWTH AND THE "CRITICAL MINIMUM EFFORT"*

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This book advances many provocative ideas on the approach, methodology, theory, and concepts in the economics of growth. The author frankly admits that the study is a "venture in the art of speculation" of a "free wheeling" sort in a field where the scope is "still unsettled" and the issues "hotly debated". In this review, I should like to concentrate on those aspects of the book where dissenting opinions may be useful in promoting the theoretical study of backward areas. As will be seen, the dissents are no less speculative than the theories they criticize.

The central hypothesis may be summarized as follows:

1. Backward economies are caught in the grip of equilibrium forces which keep per capita income fluctuating narrowly around a subsistence level. The equilibrium system conceived by the author is not a stationary but a quasi-equilibrium state in which some of the variables (e.g., capital, labor force) in the system can expand absolutely, but other variables, especially per capita income, possess a subsistence equilibrium value. "The problem for the backward economy is to transform its situation in such a way that it may escape" from this equilibrium value.

2. The problem is complicated by the fact that the equilibrium state possesses "stability in the small but not in the large", i.e., "every per capita income-raising force brings into play income-depressing forces"; at low levels of per capita income, the latter are able to overcome the former, so that small increases in per capita income are nullified, the system returning to the original equilibrium values. If sustained growth is to be generated, the stimulant raising per capita income must exceed a certain minimum effort. The latter is Leibenstein's concept of critical minimum effort.

3. Small increases in per capita income do not produce a sustained growth in per capita income because: (a) such increases tend to be "eaten up" by peasants and others; (b) population increases follow a rise in income so there is no gain in per capita income; (c) certain investments take time to become profitable; (d) investments in human beings (e.g., education) also take time before they fructify into productive activities; (e) entrepreneurial activities which lead to increases in national income (positive-sum activities, e.g., productive investments) are not encouraged while the proclivity toward activities which do not yield increases in national income (zero-sum activities, e.g., buying and selling of real estate) is not discouraged; (f) resistance to old ideas, knowledge, behavior, incentives,

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* Harvey Leibenstein, Economic Backwardness and Economic Growth, Studies in the Theory of Economic Development, a publication of the Institute of Industrial Relations, the University of California. New York: John Wiley and Sons, Inc., 1957, 295 pp.

attitudes, etc., is not overcome; (g) the capital-output ratio is large in the low income equilibrium and constitutes a hurdle. The stimulant (measured in terms of increases in per capita income) must be strong enough to overpower these before backward economies can advance beyond the reaches of equilibrium forces and into the field of sustained growth.

This bare outline of the central idea hardly does justice to the book. It suffices, however, to indicate that there is much that is plausible and persuasive. Certainly, the author can be said to have succeeded in his stated purpose: to "shed some light" on the central aspects of development. However, the question for this review is: how much light has been shed?

The Equilibrium Approach. About the same time that this book was published, another volume appeared (Gunnar Myrdal, Economic Theory and Under-Developed Regions, London, 1957), emphasizing the cumulative nature of the process of development. Myrdal stated that "...the notion of stable equilibrium is normally a false analogy to choose when constructing a theory to explain changes in a social system" (p. 12). In Leibenstein's approach a given change calls forth a reaction (self-reacting forces); in Myrdal's approach a given change sets up self-re-enforcing forces in a cumulative fashion, the cumulation being (viciously) circular for backward economies and (progressively) upward for developing ones. Part of the difference is verbal, but a large part is real. Both approaches contain an element of truth, since the process of backwardness is probably a complex of both self-re-enforcing and self-reacting forces, the relative and strategic importance of each probably depending on the particular type of backward economy or country under investigation. And I suspect that there are other types of mechanisms.[1] If backwardness is a complex of various types of mechanisms and forces, the equilibrium approach alone may not suffice to grapple with the strategic mechanism in the process of growth. The point is that a theory which is committed to a single, abstract process is necessarily special and limited.

Critical Minimum Effort. Is the pull of equilibrium forces powerful enough in the totality of forces operating in backward economies to make the author's critical minimum effort an important concept?[2] Let us examine some of these forces as outlined in 3 above. Small increases tend to be consumed by peasants and others. No evidence is given for this proposition. Is this empirical statement taken from European experience? Assuming it to be a valid statement of the behavior of European peasantry, is it valid or relevant in the context of Asia, Latin America, or Africa today? If the answer is yes, then does the increased consumption of the

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1. For example, increases in per capita income may be simply averaged out without any reacting or re-enforcing forces established. When the harvest in a given year is above normal, the increases in per capita income may be utilized not only for increased peasant consumption in the current season but to pay off debts incurred during the sub-normal harvests of the past or to stock up or save for poor seasons in the future. Or increases in per capita incomes in one region may be offset by retrogression in another region.

2. To the extent that causal forces operate in Myrdal's fashion, the circle of cumulative forces may be gradually enlarged, so that there is no need for a critical minimum effort and backward areas can grow steadily without an initial "explosive disequilibrium".

peasants necessarily go to waste? In his theory of underemployment (Chapter 6, pp. 62-66), Leibenstein propounds the view that incomes in underdeveloped agriculture are so low that the calorie intake of earners of such incomes does not suffice for adequate work effort: accordingly, increases in incomes (and therefore calorie intake) do result in proportionately larger increases in output. (This idea is basic in his theory of underemployment.) If this is so, the increased consumption of peasants out of additional income should lead to even greater output, thus producing a cumulative, upward movement (up to a point).

Another important self-defeating mechanism in Leibenstein's system is that small increases in income are followed by increases in population (via a drop in mortality rates) leaving no permanent rise in per capita incomes. This statement raises the question: do we know enough concerning the relation between income increases and population increases to draw safely the causal arrow from the former to the latter? It seems just as plausible to suppose that with the fall in the trend of mortality rates, part of the rise in population takes the form of an increment in labor force to which is attributable the larger working time and larger output. In this case, the observed rise in income is a function of a larger population and not the other way around. Further, the relation between small increases in income and mortality rates in underdeveloped countries is by no means as simple as conceived by the author. The decline in the latter today is mainly a function of the spread of medical and public health techniques and is only tenuously related to small increases in income (see Irene Taeuber, The Population of Japan, Princeton, 1958, pp. 288-309).

Still another important mechanism is the failure of small increases in income to induce changes in behavior, attitudes, practices, incentives, etc., of entrepreneurs and others in the right direction. See 3 (e) and (f). Would even large increases in income induce these changes to a significant degree? Are these changes mainly a function of the rate of income change, or are they not to a larger degree a function of a complex of time, institutions, historical past, etc.? The old social, political, cultural, economic, and ideological institutions whose changes in the right direction may be regarded as the preconditions of growth may be revolutionized under conditions of either increased (small or large), constant, or falling per capita income. Changes in these institutions during times of falling per capita income are not unlikely, since dissatisfaction with the old institutions occur when incomes are not increasing. [3]

Other obstacles to persistent growth appear to be of small consequence compared to those above, and the author makes no attempt to emphasize them. Space does not permit comments on some of these, but it may be worthwhile to discuss the author's view that the incremental capital-output ratio is large (around 4 or 5) at the underdeveloped stage and declines thereafter in the course of development (Chapter 11). The data shown in the book (p. 246) do not support this generalization (see, e.g., Mexico with a ratio of 2). In the current economic plans of Burma, Indonesia, and India the ratio used is also 2, and for Ceylon 2.5. [4]

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3. This was probably the situation during the last decades of the feudal Tokugawa period and the early years of Meiji rule in Japan.

4. ECAFE, Economic Survey of Asia and the Far East 1956, Bangkok, 1957, p. 55. In the First Five Year Plan of India, the ratio was found to be 2.3. These are, of course, ex post facto capital-output ratios.

Leibenstein's principal defense of his assumption of a declining incremental capital-output ratio is a priori. It is true, as he argues, that with sustained growth, labor productivity rises. But this means, almost inevitably, that there is a gradual shift of labor out of agriculture (low capital-output sector) for a number of decades.[5] That the impact of this shift on the incremental capital-output ratio is considerable may be seen from a comparison of average capital-output ratio for the major sectors. For India in 1949-50, the average capital-output ratio for agriculture is around 0.6, but for mining, manufacturing, organized transport, communication, and commerce, it is more than three times as much, or about 2.0. For Japan in 1955, the latter is two times the former.[6] Such a disparity in the average capital-output ratio of the sectors implies that with the shift of the labor force from agriculture to modern industry, the incremental capital-output ratio will rise, under normal and usual conditions of sustained growth. I would guess that this rise will easily offset the factors mentioned by Leibenstein in support of his generalization of a declining ratio (see p. 183, where seven factors are mentioned; space does not permit discussion of these factors, but they appear to be of negligible importance).

During many decades of growth, the incremental capital-output ratio may rise from around 2 for Asian underdeveloped economies to perhaps around 4 in the semi-developed stage such as that of Japan. After a while, this ratio may begin to fall. This turning point may be reached when production by mechanization and other roundabout and capital-intensive methods replaces handicraft production (low capital-output ratio) to such an extent that it may be said to prevail over most of secondary industry. At this point also the service sectors (low capital-output ratio) begin to assume growing relative importance (Colin Clark). From this point on the economy may be said to be fully developed. The NBER studies of average capital-output ratios for the United States would suggest such long-term movements of the incremental ratios, the fully developed stage being attained for the U.S. around the period just prior to World War I.

In Chapter 13, a partial summary of Leibenstein's hypothesis is given in terms of illustrative diagrams. These diagrams are too complex to be easily

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5. See Kuznets in this journal, Vol. V, No. 4 (Supplement), and Vol. VI, No. 4 (Supplement). An important reason for the shift is that the income elasticity of demand for food is less than unity in most underdeveloped countries. See H. S. Harthakker in Econometrica, October 1957, p. 540.

6. Computed from "An Estimate of the Reproducible Tangible Wealth in India 1949-50", by Uma Datta and Vinod Prakash, paper presented at the Preliminary Conference on Research in National Income, New Delhi, January 1957, Central Statistical Organization, Government of India, and from official national income figures. The Datta-Prakash estimates for agriculture are approximately confirmed by computations based on the data of the Reserve Bank of India, All-India Rural Credit Survey, Vol. 3, p. 672-89. For Japan, computations are based on the 1955 National Wealth Survey (in Japanese), Economic Planning Board, 1958, Vol. I, pp. 44-69 (Volumes 2 to 6 give the definitions and sampling methods used), and official national income figures. These are the best estimates of reproducible wealth that I know of for the two countries.

summarized. The questions raised by these diagrams are: when the stimulant is powerful enough to meet the condition of Leibenstein's sustained growth (e.g., Figure 13-11, where there is an excess of investment demand over actual saving), would not this produce a situation of rapid inflation rather than sustained growth? In these diagrams and elsewhere the author fails to consider the problem of inflation in relation to his minimum critical effort thesis, so concerned is he with the strength of forces keeping underdeveloped countries down to the subsistence-level equilibrium. And yet this is a very real problem of underdeveloped economies, in which Say's Law is fully valid.[7] Regarding his other case (Figure 13-10), where the stimulant is too mild for sustained growth, the diagram shows ex-ante savings exceeding actual investment. Since this diagram is intended to represent the "dead center" position of underdeveloped countries, the author seems to be suggesting that the dilemma of underdeveloped countries is similar to that of developed ones, namely, the tendency of savings to exceed investment. What then happens to his statement that in backward areas net savings are "exceedingly small or absent"? (p. 43).[8]

In sum, I do not find Leibenstein's theory of critical minimum effort as applied to present-day underdeveloped countries very convincing. This is not to say that it is irrelevant for the beginnings of growth of some of the developed countries. Leibenstein's theory may be taken to be part of the explanation of the historian's "take-off into self-sustained growth".[9]

In addition to the central hypothesis, the book includes a theory of underemployment in densely population backward areas (Chapter 6), a theory of population growth (Chapter 10), and a discussion of investment criteria (Chapter 15). I have touched on the empirical aspects of the first elsewhere and give a brief summary of the theory.[10] The crux of this theory turns on the proposition that,

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7. If powerful stimulants can be injected into the economy without causing inflationary conditions, one would in principle favor them over mild stimulants, even if there is no such thing as a minimum critical effort, since rapid growth is preferable to slow growth.

8. Perhaps the author has in mind a very special meaning of saving, since at one point he refers to it as "potential saving". The latter should be defined and the shape and position of its supply schedule argued and related to the investment-demand schedule.

9. W. W. Rostow, "The Take-Off into Self-Sustained Growth", Economic Journal, Vol. LXVI, No. 261; see also the critique by Douglass North, "A Note on Professor Rostow's 'Take-Off' into Self-Sustained Economic Growth", Manchester School, Vol. 26, No. 1, pp. 68-75.

10. Harry T. Oshima, "Underemployment in Backward Economies: An Empirical Comment", Journal of Political Economy, Vol. LXVI, No. 3, pp. 261-262. In his reply to my note, Leibenstein misinterprets my remarks to mean that there is a shortage of just male labor during the peak agricultural seasons. But reference to my citations will show that in most cases there is a shortage of all types of labor. He also thinks that "some rearrangement in organization and equipment appropriate to the smaller population and labor force (but without increasing capital in the aggregate)", ibid., p. 264, will show up the labor surplus. If so, (continued on next page)

in the absence of institutional arrangements, wage levels in backward areas can so low (due to the assumption of zero or near zero marginal product of labor) that it is to the interest of the landlord to pay wages higher than marginal product, because by so doing the increase in physical output is greater than the wage increase, thereby increasing the net revenue of the landlords. Leibenstein's model (which is a macro-model) is indeterminate. To be determinate he must stipulate that product prices remain unchanged. In his theory output is rising faster than wages (because the wage elasticity of productivity is greater than unity). Accordingly, product prices may fall and fall sharply in part because the demand curve for the basic foods may be highly inelastic. If so, the indicated results, i.e., the increase in the landlord's net revenue at higher wage levels, do not follow.

In his population theory, the author contributes an over-all framework for the linking of population growth to economic growth in general. The portion of the discussion relevant to backward areas deals with his explanation of "why fertility rates do not fall whereas mortality rates do". "We can attribute the existence of the fertility lag to two factors: One is what we might call the 'realization lag', and the other is the influence of the survival effects of this juncture" (p. 166). It takes time for the families in backward areas to realize that the decline in mortality is a permanent thing.[11] As to the survival effect, the author argues that since the initial decline in mortality rates affects mainly infant mortality rates, the number of children surviving rise considerably. "The economic costs of children decline since a higher proportion reaches the productive age groups where they make some contribution toward their maintenance. Therefore, the initial survival effect is to enhance the productive value of an additional birth. However, as mortality rates continue to decline, the relative impact on the infant age group lessens compared with the impact on the higher age groups...as a source of parental income, increased survival in the higher age groups is unimportant since in those age groups the children have their own family financial responsibilities" (p. 164). There is some plausibility to these statements, which are very suggestive. But one is left with an uneasy feeling that the author has failed to come to grips with either the formulation or solution of the problem. We now have an authoritative study of the dynamics of fertility and mortality rates in an industrializing society for the one country in Asia, Japan, which experienced substantial declines in these rates (see Irene Taeuber, The Population of Japan, Princeton, 1958). While Leibenstein singles out variables such as income, utility, security, survival effect, etc., in his model, these are trivial in

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he should specify and describe such rearrangements since they would be of enormous policy interest. It is easy enough to refer abstractly to these arrangements, but I have yet to come across a single such proposal. Even as simple a matter as the consolidation of scattered strips in Asia entails an enormous amount of capital. For it inevitably presumes a shift from subsistence to commercial agriculture in Asia and the latter in turn requires roads, transport, etc. Cf. Ragnar Nurkse, "Reflections on India's Development Plan", Quarterly Journal of Economics, Vol. 71, No. 2, p. 191.

11. The high fertility rates still prevailing in Puerto Rico after many decades of falling mortality rates suggest that the "realization lag" may not be important. On the demographic experience of Puerto Rico, see Paul K. Hatt, Background of Human Fertility in Puerto Rico, Princeton, 1952, p. 342; also J. Mayone Stycos, Family Fertility in Puerto Rico, Rio Piedras, 1955.

Taeuber's explanation which is focused on industrialization, urbanization, socio-cultural changes, and historical factors. Leibenstein's variables are perhaps crucial for a developed society like the United States, but their relevance for underdeveloped societies is questionable.

In the final chapter, Leibenstein rejects the use of marginal productivity as a criterion of investment allocation and suggests that what should be maximized is not only the marginal product of the given investment, but also "the sum of all subsequent 'general reinvestment' divided by the size of the population at the related time points" (p. 267). The volume of "general reinvestment" is measured by the extent to which the marginal product of the given investment is in turn invested in physical capital and in human beings, e.g., through education. And since per capita income is in question, that investment is desired which will maximize the sum of its marginal product plus its "general reinvestment" and will minimize the increase in population. This seems to be an important contribution to the discussion of investment criteria, and (Galenson's and) Leibenstein's earlier paper on the problem has been the subject of lively discussions in the Quarterly Journal of Economics.[12] But if reinvestment is to be the criteria, why confine it to the sum of reinvestment flows from a particular industry (or investment)? That is to say, why shouldn't the test of investment policy in a particular industry be the sum of reinvestment (and saving) flows, not only from the industry in question, but from other industries as well (such as industries which are consumers of the product of the industry in question). To take an extreme example, reinvestment flows from luxury industries (jewelry, toilet articles, higher-priced apparels) may be extremely high, but the effect of their sale is to raise the propensity to consume in the economy at large. In contrast, reinvestment flows may be small or even negative in the fertilizer or farm-tool industries, partly because peasants are too poor to pay an adequate price for the products. But investment in these industries may maximize present and future per capita income even more than the luxury industries if the low-priced fertilizer and farm tools lead to a rise in the propensity to save and invest of agriculturists (via the prospects of rising farm productivity they make possible). What these industries are and how the existing pattern of saving habits can be changed should be a crucial problem in investment allocation theory. The use of the reinvestment concept does not offer much hope for a rapid enough growth of most of our underdeveloped countries under conditions of democratic planning such as that of India.[13]

It is the view of Leibenstein that his reinvestment criteria will lead to investment in modern industry rather than agriculture (pp. 261-264). Since fertility rates are lower in the former than in the latter, investment in the former tends to maximize per capita product by preventing population from increasing too rapidly. For underdeveloped countries with great population densities, industrialization and its correlate, urbanization, may not suffice as solutions for the demographic problem. In The Population of Japan, Irene Taeuber shows that, despite

12. "Investment Criteria, Productivity, and Economic Development", Quarterly Journal of Economics, Vol. 69, No. 3.

13. The investment of only a few percent (2, 3, or 4 percent) of public funds even in the highest reinvesting industries will leave unaffected the saving and investment habits of large segments of the economy, such as agriculture, trade, and services, which usually comprise three-quarters of the labor force in backward economies.

sharp declines in fertility rates (due to rapid industrialization and urbanization), the population of Japan continued to increase at a rate much too rapid in relation to available resources. Mortality fell almost as steeply as fertility, the former being a function of the application of modern medical and public health technologies, besides industrialization. And though fertility rates today have dropped to Western levels, population increases (at least up to the 1970's) continue to plague Japanese economists. If Japanese experience is at all relevant, it points to the need for a more direct attack on the demographic problem than mere industrialization.[14] The point of this discussion is that investment and demographic problems should be divorced and considered separately.

It seems to this reviewer that a large part of the difficulties outlined above are traceable to the author's methodological approach. His theorizing, while less abstract than that of others (e.g., Trygve Haavelmo, A Study in the Theory of Economic Evolution, Amsterdam, 1954), is still too abstract. In Chapter 4, he notes that there are certain "commonly observed characteristics of backward economies", e.g., low per capita income, capital, and saving; disguised unemployment; small size of farms; rural overcrowding; low yields per capita; etc. (pp. 40-41) and proceeds to explain their existence. Since this practice of lumping together all underdeveloped countries is common practice with a number of theoreticians writing on backward economies, a question may be raised on this procedure.

In addition to errors of estimation, conceptual incomparabilities and inadequate coverage of countries in each region impair the comparisons in Table 1; Japan, Argentina, Puerto Rico, and various small countries in Central America and the Caribbean area are omitted from the table. However, it is not likely that better data and wider coverage of countries will upset the broad conclusion that the table is designed to convey, namely, that the set of structural proportions and magnitudes point to significant differences in the level of development of Latin American and Asian countries. Most of the measures (especially items 1 to 9) have been found to be fairly stable indices of growth, and the differentials in the figures for the two regions appear large enough to warrant that serious attention be paid to the proposition that the two regions represent different types of backwardness.[15]

More important than the quantitative differences are the qualitative differences (especially of the institutional variety) to which the theorizing in Leibenstein's book pays too little attention. The Asian scene is dominated by rice culture, subsistence agriculture, peasant farming, petty handicrafts, itinerant traders; in contrast is maize culture, commercial agriculture, estate farming, absentee landlord

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14. The propagation of birth control techniques like industrialization will help but may not suffice. As Leibenstein suggests, and as is confirmed by Taeuber for Japan, methods of family limitation are known to and practiced by peoples of underdeveloped areas, up to a certain extent, at least. More direct measures may be necessary, such as, for example, the levying of a direct tax on families which are too large.

15. The maldistribution of income in Latin America is probably considerably greater than in Asia. See Harry T. Oshima, "A Note on Income Distribution in Developed and Underdeveloped Countries", Economic Journal, Vol. 74, No. 261, pp. 156-160.

Table I. Comparison of Selected Parts of Latin America and Asia

	Latin America	Asia
1. Dollar income per capita, 1952-1954	$230.00	$ 70.00
2. Daily caloric intake per capita, around 1952	2300	1800
3. Income originating in agriculture, 1950-1954	30%	50%
4. Labor force occupied in agriculture, census years	64%	74%
5. Income originating in industry, 1950-1954	30%	17%
6. Labor force occupied in industry, 1950	15%	9%
7. Share of government in GDP, 1950-1954	13%	10%
8. Share of food expenditures in GDP, around 1950	40%	50%
9. Yield per person in agriculture, metric tons	0.48	0.22
10. Cultivated land per capita, hectares	0.75	0.27
11. Female labor force participation rates, census years	11%	22%
12. Paid employees as a proportion of total labor force	51%	24%

Notes and sources: Population data used as weights to combine individual countries.

1. Per Capita National Product of 55 Countries 1952-54, UN Statistical Papers, Series E, No. 4, p. 8.
2. FAO, Yearbook of Food and Agricultural Statistics, Production, 1956, p. 217. Includes Brazil, Chile, Peru, Uruguay, Venezuela, and Honduras for Latin America; only India for Asia.
3. Agriculture includes forestry, hunting, and fishing. Data compiled from UN, Yearbook of National Accounts Statistics, 1957, New York, 1958. Includes Brazil, Chile, Colombia, and Peru for Latin America; India, Ceylon, Philippines, Pakistan, Burma, Indonesia, South Korea, and Thailand for Asia.
4. UN Statistical Office, Demographic Yearbook 1955, pp. 510-564; and ILO, Yearbook of Labour Statistics, 1954, pp. 10-32. Includes Mexico, Brazil, Peru, Colombia, Bolivia for Latin America; Ceylon, India, Malaya, Philippines, Pakistan, and Thailand for Asia. Data for India from Final Report of the National Income Committee, New Delhi, 1953, p. 23.
5. Industry includes mining, manufacturing, transportation, communication, and public utilities. See Note 3 for sources and countries included.
6. Industry as defined in Note 5, and source as in Note 4.
7. Based on data from Harry T. Oshima, "Share of Government in Gross National Product for Various Countries", American Economic Review, Vol. 47, No. 3, pp. 382-383.
8. Approximations from preliminary computations (unpublished).
9. UN, Land Reform, New York, 1951, p. 4 and Appendix Tables 1 and 3.
10. Ibid.
11. UN Statistical Office, Demographic Yearbook 1955, Table 16.
12. Ibid.

etc. And differences exist in the historical, social, cultural, political, and religious institutions as well.[16]

Is it then safe to abstract from these differences and assume that certain essentials have not been missed in the theories? For example, a given rate of increase in population may be an obstacle to growth in Asia but may be favorable or neutral in most parts of Latin America and Africa; increases in income may not be largely consumed in large parts of Latin America, where income levels may be above physical subsistence. Although one can never be certain about these matters, it does not seem likely that a single theory of backwardness exists which is applicable to regions so different as Asia, Africa, and Latin America. Even if all backward areas can be diagnosed as economically ill, their maladies may be different.[17] However, the above criticisms aside, it would be interesting to see an attempt made to apply some of the many suggestive ideas in this highly original book to certain underdeveloped countries.

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16. Africa south of the Sahara presents a picture of backwardness sharply different from that of either Asia or Latin America. On the importance of institutions in the construction of theories, see J. M. Clark, Economic Institutions and Human Welfare, New York, 1957, preface and pp. 279, 28[illegible]

17. Even a cursory survey of the early growth of Japan and the United States suggests immediately different types of development. In one case, growth proceeded on the basis of an abundant supply of labor; in the other, abundant supply of land, especially in the form of a frontier. Dr. Virgil Salera in a letter to the writer points out that his experience with Latin American economies suggests frontier-like movements of the population in certain parts of Latin America. See also Daniel Neumark, The South African Frontier, Stanford, Calif., 1957.

COMMENT ON THORNER'S REVIEW OF PILOT PROJECT, INDIA*

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One major point in Mr. Thorner's critique in the April issue calls for answer or comment. This point is of wide interest, and has both timely and timeless significance. It is simply this: is a man justified in working for a government only if he approves of all its policies? How far is he ethically justified in formulating and initiating and carrying out projects which give great promise to the country and its people if he must work within an overall policy which he does not control? If he does work within a given policy, may he then be said to be blind to the faults of the system?

Such questions are inherent in Thorner's comments that: "Fundamentally, the project method rests on a degree of confidence that structural obstacles to village progress are either non-existent or insignificant. From this point of view no account need be taken of such factors as land tenure, population pressure, or relations between city and country." Thorner is wrong if he means that any planner in India can be unaware of such harsh and over-arching problems; I was not unaware of them, nor were my associates in Uttar Pradesh. His implication must then be that no specific work can go ahead and be worthwhile until all major political and biological issues are settled, and that to go ahead before settling these issues is tantamount to having concluded that such issues do not exist or do not matter.

He makes here the sort of assumption made by villagers when we first worked with them at Etawah--that we were the Government, that we could get irrigation dues remitted, that we could give a job to a farmer's son, that we could trace down and recover stolen goods, that we should decide conflicts. We soon found it necessary to issue a bulletin titled, "What the Pilot Project Organization in Etawah Cannot Do", reproduced in the book on pages 133-134.

On the positive side, we had already stated our fundamental purpose at the beginning of our original plan: "To see what degree of productive and social improvement, as well as of initiative, self-confidence, and cooperation, can be achieved in the villages of a district not the beneficiary of any set of special circumstances and resources..." (p. 37).

Thus the philosophy activating and animating work in the pilot projects is to alert people--to raise their quality of living, their initiative, and their level of

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* Daniel Thorner, "Dropping the Pilot: A Review", this journal, Vol. VII, No. 3, pp. 377-380; see also McKim Marriott, "Replies from the Pilot House", loc. cit., p. 381.

expectations--so that they are prepared for and can demand and can make more successful use of whatever improvements are devised in the overall governmental and economic system. Absence of recognition of the need for this dynamic ingredient--the need for better quality of performance, and above all, rigorous ways for achieving it--has stood in the way of maximum accomplishment in underdeveloped countries even when major structural changes did take place or major help was received. Overcoming this obstacle in the field, transmuting the writings and perorations of high-level leaders into actual ferment and accomplishment while maintaining openness to and stimulating demand for systematic change--these are the requirements for success and continuing success in any system. These are not substitutes for the major changes which Thorner notes. But they are built-in requisites for the success of any greater plan. Their achievement, it seems to me, is the continuing significance of the Etawahs, and ample justification for the high endeavor and rigorous planning that should go into them.

BOOKS RECEIVED

Hugh G. J. Aitken, ed., The State and Economic Growth. New York: Social Science Research Council, 1959, pp. x + 389, $3.75.

Richard K. Beardsley, John W. Hall, and Robert E. Ward, Village Japan. Chicago: The University of Chicago Press, 1959, pp. xv + 498, $8.75.

Thomas O. Beidelman, A Comparative Analysis of the Jajmani System. Locust Valley, N.Y.: J. J. Augustin, Inc., 1959, 86 pp., $2.50.

Margaret Clark, Health in the Mexican-American Culture: A Community Study. Berkeley: University of California Press, 1959, pp. xii + 253, $5.00.

Thomas C. Cochran, The Puerto Rican Businessman, A Study in Cultural Change. Philadelphia: The University of Pennsylvania Press, 1959, 198 pp., $5.00.

Ralf Dahrendorf, Class and Class Conflict in Industrial Society. Stanford, Calif.: Stanford University Press, 1959, pp. xvi + 336, $6.50.

Benjamin Higgins, Economic Development: Problems, Principles, and Policies. New York: W. W. Norton and Co., 1959, pp. xviii + 803, $7.50.

ILO, Trade Union Rights in the U.S.S.R. Geneva: International Labour Office, 1959, pp. iv + 158, $1.25 (paperbound).

Karl Marx, A World without Jews, edited by Dagobert D. Runes. New York: Philosophical Library, 1959, pp. xii + 51, $2.75.

Richard L. Meier, Modern Science and the Human Fertility Problem. New York: John Wiley and Sons, 1959, pp. xiii + 263, $5.95.

Ilse Mintz, Trade Balances during Business Cycles: U.S. and Britain since 1880. New York: National Bureau of Economic Research, 1959, pp. x + 99, $1.50.

Dagobert D. Runes, A Book of Contemplation. New York: Philosophical Library, 1957, 149 pp., $3.00.

Warren S. Thompson, Population and Progress in the Far East. Chicago: University of Chicago Press, 1959, pp. ix + 443, $7.50.

Vladimir P. Timoshenko and Boris C. Swerling, The World's Sugar, Progress and Policy. Stanford, Calif.: Stanford University Press, 1957, pp. xii + 364, $6.50.

S. H. Udy, Jr., Organization of Work: A Comparative Analysis of Production among Nonindustrial Peoples. New Haven, Conn.: HRAF Press, 1959, 182 pp., $3.95.

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